

W.M.

JAMAICA.

FC 752

ANNUAL REPORT

OF THE

SUPERINTENDING MEDICAL OFFICER,

Together with the Reports on the following Departments of the Medical Service
of the Island, viz:

THE PUBLIC HOSPITAL
THE LEPERS' HOME

THE LYING-IN HOSPITAL
THE LUNATIC ASYLUM

FOR

December. 1920

THE YEAR ENDED 31ST MARCH, 1921.

Ordered by His Excellency the Governor to be Printed.



WELLCOME INSTITUTE LIBRARY	
Coll.	W.M.Omec
Call	-f
No.	14-11
	V.A.22
	1972
	J27

1972



22501398314

M E D I C A L,

REPORT FOR THE YEAR ENDED 31st DECEMBER, 1920.

Island Medical Office, Kingston,
Sir,

I have the honour to forward the accompanying Returns and Reports for the information of His Excellency the Governor embracing the year which began on January 1st, 1920, and ended on December 31st, 1920.

On 9.2.20 I assumed the duties of S.M.O., Jamaica, taking over from Dr. Lawson Gifford, who acted as S.M.O. since the lamentable death of the late S.M.O., Dr. J. E. Ker, which took place in October, 1918.

PERSONNEL.

Dr. C. E. Sharp was appointed M.O. Pub. Hospital and Dr. A. G. McKenley, D.M.O. May Pen on 12.1.20.

Dr. F. H. Cooke was transferred to Stony Hill on 30.1.20.

Dr. J. H. Peck, was appointed Medical Attendant Lepers Home and Surgeon St. Catherine District Prison 23.1.20.

Dr. H. H. Blair was appointed to act as D.M.O. Spanish Town on the same day.

Dr. G. F. Baxter was appointed as Supernumerary Medical Officer Public Hospital on 1.2.20.

Dr. A. T. Clarke was appointed D.M.O. Old Harbour on 10.6.20.

Dr. L. M. Moody was appointed Govt. Bacteriologist and Pathologist on 16.6.20.

Dr. T. M. Bartlett was appointed to act as D.M.O. Hagley Gap in addition to his own district as from 1.5.20 and the resignation of Dr. A. J. Salmon.

The following officers were appointed permanently to the districts as from 1.7.20.

Dr. C. D. Johnston, Black River; Dr. E. D. Gideon, Buff Bay; Dr. R. H. Davidson, Gordon Town; Dr. J. R. Mott-Trille, Newport; Dr. A. G. McKenley, May Pen; Dr. H. T. Strudwick, Cave Valley; Dr. J. A. Watson, Croft's Hill; Dr. R. M. Atkinson, Ulster Spring; Dr. W. I. Escoffery, Gayle; Dr. N. anford, Lamb's River; Dr. A. M. Mills, Adelphi; Dr. D. L. Tate, Montego Bay; Dr. G. P. Campbell, ucea.

Dr. R. G. Sherlock was appointed to act as D.M.O. Falmouth and relinquished the acting appointment in favour of Dr. S. T. Vine.

Dr. J. G. Geoghegan was appointed D.M.O. Falmouth but resigned before taking up his appointment.

Dr. A. W. Thompson was given temporary charge of Crofts Hill and Frankfield Districts in addition to his own at different times until permanent appointments were made.

Mr. J. S. Myers was appointed D.M.O. Glengoffe on 1.11.20.

Mr. M. C. Solomon was appointed Chief Clerk in the Head Office on 1.6.20.

Mr. S. M. Edwards was appointed 1st Assistant Medical Storekeeper on 19.10.20.

Mr. D. G. Parsons retired from the Service on 1.6.20.

Dr. C. A. H. Thomson resigned his appointment on 19.9.20 after rendering valuable services to the Department.

The following officers were given leave of absence during the year.

Name.	Period of Absence.	Period during which absent.	Acting Officer.
Dr. S. A. Isaacs ..	3 months	10.7.20 to 9.10.20	Dr. C. E. Harvey
Dr. E. R. C. Earle ..	6 weeks	18.3.20 to 29.4.20	Dr. L. B. Lyon
Dr. E. R. C. Earle ..	2 weeks	3.5.20 to 17.5.20	do
Dr. E. R. C. Earle ..	2 $\frac{3}{4}$ months	2.9.20 to 22.11.20	do
Dr. C. A. H. Thomson ..	3 months	19.6.20 to 18.9.20	Hospital Staff
Dr. F. A. G. Purchas ..	2 weeks	20.7.20 to 4.8.20	Dr. Sherlock
Dr. M. Grabham ..	3 months	April 20 to June 20	Dr. C. A. H. Thomson
Dr. F. A. Ritchie ..	2 weeks	3.8.20 to 17.8.20	Dr. Nixon
Dr. J. H. Peck ..	2 weeks & 5 days	11.12.20 to 29.12.20	do
	8 weeks	5.11.20 to 2.1.21	Dr. H. H. Blair
	6 months	24.1.20 to 23.7.20	Dr. E. E. Melville
Dr. S. C. DePass ..	3 months	3.12.20 to 3.3.21	Dr. G. Machado
	2 $\frac{1}{2}$ months	1.1.20 to 19.3.20	Dr. C. S. Gideon
Dr. E. D. Gideon ..	2 weeks	23.11.20 to 7.12.20	Dr. C. A. Moseley
Dr. G. P. Campbell ..	9 weeks	6.12.20 to 31.1.21	Dr. R. G. Sherlock
Dr. C. E. Sharp ..	6 weeks	24.5.20 to 4.7.20	Hospital Staff
do ..	6 weeks	5.7.20 to 16.8.20	do
do ..	2 weeks	22.10.20 to 4.11.20	do
Dr. D. L. Tate ..	10 days	23.12.20 to 1.1.21	Dr. McCatty
Mr. D. G. Parsons ..	3 months	1.3.20 to 31.5.20	Mr. E. A. Morris
Mr. B. M. Clark ..	3 $\frac{1}{2}$ months	3.8.20 to 15.11.20	Office Staff
Miss E. M. Thomson ..	3 weeks	11.10.20 to 3.11.20	Miss McNeil Smith
Mr. C. Don ..	12 days	7.12.20 to 19.12.20	Mr. S. M. Dailey
Miss S. Bridge ..	1 month & 5 days	26.11.20 to 31.12.20	Miss G. Cunningham
Dr. J. A. Barnes ..	10 weeks & 5 days	8.1.20 to 23.3.20	Hospital Staff

INFECTIVE DISEASES.

Enteric Fever. (Typhoid & Para-Typhoid).—The total number of cases occurring during 1920 was 923 as against 941 during 1919-20. The disease seems endemic in some districts. All nurses and probationers at the Kingston Public Hospital get prophylactic inoculation of T.A.B. and though they frequently come in contact with this disease the incidence of Typhoid Fever amongst them is extremely low. The general public are slowly recognising the value of protection against this very fatal disease, and an increasing number are seeking inoculation.

Malaria.—This disease continues to be prevalent throughout the year, but the consensus of opinion amongst D.M.O's is that the type is not so severe as in previous years. The number of cases treated in the Public General Hospitals show 2,803 with 49 deaths, a rate of 1.8 per cent. as compared with 2,562 cases treated in the previous year with 60 deaths, a rate of 2.3 per cent.

Quinine prophylaxis is being carried out, and large quantities are issued by this Department for sale at the Post Offices in the Island.

Alastrim or Kaffir Milk Pox.—The outstanding medical feature during the period under review was an epidemic of an eruptive fever known as Alastrim or Kaffir Milk Pox, which broke out in Kingston in May, and from Kingston spread to the other parts of the Island. It is satisfactory to note that the death rate was exceptionally low.

The epidemic is still in existence, but is markedly on the decline, both in incidence and type.

Attached is a Memorandum issued to all D.M.Os. and others having to deal with the epidemic, also extract from a report by the Bacteriologist who made complete and exhaustive examination in connection with it. A satisfactory feature in connection with this epidemic is that better protection now exists against small pox (an ever present menace) than ever before in Jamaica, large numbers of the inhabitants having been vaccinated and revaccinated.

ALASTRIM.

(Synonyms: KAFFIR MILK POX, AMMAS.)

Definition.—A disease characterised by sudden onset usually with headache and a febrile state lasting most frequently from 2 to 3 days at the end of which period a papular eruption appears on the skin and in the succeeding days passes through stages of vesicle pustule and crust.

The onset is with a rise of Temperature, ranging generally between 100 to 103, and headache, often severe.

Pain in the small of the back is present in a number of cases and is generally mild; whilst in other cases there are generalised pains in the limbs such as occur at the onset of influenza.

Vomiting is nearly always absent; and, if present, is never severe, occurring usually not more than once or twice.

There is general malaise and constipation.

With the appearance of the eruption the constitution symptoms abate and the patient is practically well until the tension in the skin, consequent on the maturation of the vesicle, puts an end to his happiness. The pain of maturation is most marked where the skin is thickest—namely, the palms of hands and soles of feet. But the fever of maturation is usually only very moderate.

Eruption.—No prodromal rashes have been noted so far.

The eruption appears most frequently on the 3rd day of illness, but may appear as early as the 2nd or as late as the 5th day. It is from the first papular and feels fairly superficial and is, in the lighter skin, surrounded by a red areola. It rapidly become vesicular and usually begins to be pustular by the 5th day after it has made its appearance. Drying and crusting begin on the 6th or 7th day and proceed rapidly, so that in all but the more severe cases the scales on the face are frequently off by the 10th to 12th day after the rash has appeared.

In cases in which the rash is heavy the development of the pox is accompanied by marked oedema of the subcutaneous tissues, and this may cause almost complete closure of the eyes. In the milder cases oedema is present but is not severe.

In a number of the cases some of the pocks never become pustular but start to dry in the vesicular stage, especially is this the case when they are injured; and in many cases the pus never advances to the stage of being thick and yellow.

The Distribution is largely that of small pox—chiefly on the face and extremities and upper part of the back. The face never escapes; and a few pocks can generally be found on the palms and soles even in mild cases. The scalp also is uniformly affected though the rash here is frequently scanty. In the severe cases vesicles are sometimes found in the mouth on the hard and soft palate and on the fauces but have not been seen on the conjunctiva though they are present often on the margin of the lids.

The individual lesion is unilocular and can be emptied by a single prick. It is more superficial than that of small-pox and is very generally not umbilicated. An appearance of unbilication is often due to some small crusting in the centre of the vesicle. But even where umbilication is fairly definite the vesicle is still unilocular.

General Symptoms and Signs.—Apart from the symptoms of onset and the symptoms due to the eruption there is often present pain in the throat which on inspection is injected or may shew the presence of pocks, and the glands at the angle of the jaw are often enlarged and somewhat tender.

Adenitis in other regions is absent as a general rule, apart from secondary infections.

There is no palpable cnlaregement of liver or spleen and Albuminuria is absent unless due to some other cause.

Course.—The disease runs a mild course, except for the malaise of onset and the pain of maturation; and the appetite is good. The course is almost uniformly uneventful but in some of the severer cases trauma may cause great areas of the skin to be raw.

Complications and Sequelæ are practically non-existent. Boils occur in a number of patients and in others there is a certain amount of falling of the hair afterwards. Raw areas of skin caused by trauma in the severer cases may prove troublesome.

Diagnosis.—The Diagnosis from true small pox rests on the following points:

1. The comparative slightness of the constitutional symptoms especially the general *absence of severe Backache*.
2. The unilocular character of the vesicles.
3. The co-existence of severe rash and comparatively slight effects even at the height of pustulation.
4. The very low mortality even in children.
5. The general rapidity of the course of the disease.
6. In women menstruation is absent unless a regular period has arrived.

Prognosis and Treatment.—The Prognosis is good and the treatment is “secundum artem.” The protection afforded by Jennerian vaccination is definite but not absolute.

Extract from a Report by the Bacteriologist on Alastrim.

RESEARCH WORK.

For some few months before my arrival in the Colony an epidemic of an eruptive fever described as Alastrim or Kaffir Milk Pox broke out in Kingston, and from Kingston spread to the other parts of the Island. Up till the end of March, 1921, 2,912 cases have passed through the Isolation Hospital at Bumper Hall, Kingston, and about 6,000 have occurred throughout the Island.

During July, August and September 1920, I paid several visits to the Isolation Hospital at Bumper Hall in order to collect notes and make observations on a number of cases. This entailed spending in extra work about 4 hours a day outside my official hours.

Altogether notes on 202 cases were taken, bits of tissue were removed for microscopic examinations; 8 post mortems were performed; animals were inoculated; photographs were taken, and 60 cases were vaccinated after their attack of Alastrim.

For the purpose of this Report I propose to consider:—

1. The clinical aspect of the disease;
2. Its occurrence in the foetus;
3. Its relation to vaccination;
4. Its Pathology.

CLINICAL ASPECT.

Incubation period.—Owing to the difficulty of getting cases in which exposure occurred only once and that for a short time, it has been impossible to determine the exact period of incubation; but in the cases in which I was able to get some definite history of exposure the incubation period varied from 10 to 14 days.

Onset.—The onset of the disease is sudden. There is a rise of temperature accompanied by head ache and backache and occasionally pains in the limbs and vomiting. The rise of temperature was constant.

Of 202 cases of both sexes (133 males and 69 females) the incidence of the various symptoms of onset were as follow:

Headache	172 cases or about 85%
Backache	111 cases or about 54%
Pain in limbs	41 cases or about 25%
Vomiting	32 cases or about 16%

The headache when present was generally severe and often either frontal or vertical.

Of the 111 cases in which backache occurred only 45 described their pain as severe; the remaining 66 described it as moderate. Backache was relatively far more frequent among the women than among the men; 70% of the former complained as compared with only 45% of the latter, and 27 of the 45 severe cases were among the 69 women; the greater incidence of backache among the women is probably due to the fact that many of them were victims of chronic Endometritis and magnified their usual backache symptoms.

The combination of headache, vomiting and pain in the back occurred in only 21 of the 202 patients and of these only 6 vomited more than once and only 1 more than three times. In the majority of cases the tongue was furred and constipation was present.

Other manifestations.—The characteristic eruption appeared with about equal frequency on the 3rd or 4th day after the onset of the symptoms. The actual figures are as follows:

- In 21 cases the rash occurred on the 2nd day.
- In 75 cases the rash occurred on the 3rd day
- In 70 cases the rash occurred on the 4th day.
- In 36 cases the rash occurred on the 5th day.

Either shortly before or after the appearance of the rash the temperature falls and the constitutional symptoms disappear. The patient is then quite happy until Maturation begins, when for 2 or 3 days there is a great deal of pain from the tension under the skin. In a number of cases there is also secondary fever.

No prodormal rashes were seen.

Delirium was never observed.

The deep depression which occurs at the onset of true small pox was uniformly absent.

Menstruation did not appear in the women unless a period was due and even then no one complained of more than her usual loss of blood.

Odour.—There was an absence of odour such as is produced by small-pox. A few cases, however, developed a distinctly putrefactive smell which was due to discharges decomposing.

Pain in the throat and Dysphagia accompanied in some cases of Aphonia and enlargement of the glands of the neck were noted as occurring in a number of cases. These symptoms were due to the presence of the eruption on the fauces and presumably in the larynx and Trachea.

Sputum.—Three cases had Bronchitis signs in the chest and for a few days coughed up blood-stained sputum.

In two cases there was profuse diarrhoea at the onset but the majority were constipated.

The Urine.—In 50 cases whose urines were examined Albuminuria was absent, unless due to some other cause, such as Urethral or Vaginal discharge.

Unfortunately no urines were obtained before the eruption appeared and in none of the cases was the examination performed more than once. There was one case of Diabetes, the eruption ran the usual course in him, but was followed by a large amount of boils.

Eruption.—Patients do not usually come under observation until the rash is well developed; but in two cases which were admitted to the Isolation Hospital in the pre-eruptive stage, the rash appeared as small papules which to the touch were quite superficially situated. These papules became vesicular in about 36 hours.

The vesicles are circular in shape and when fully matured are from 4-5 mm in diameter. The summit is either dome shaped or flattened and frequently shows a darkened central area. In the early stages the vesicles, if pricked, yield a clear serum quite free from cells, but Polynuclear leucocytes begin to appear in the fluid on the 2nd or 3rd day and gradually increase in numbers until turbid fluids or even sometimes thick pus is formed. At this stage the lesion is very tense, hard and shotty.

In the lighter coloured skins a definite red areola surrounds each pock. Primary umbilication is not often if ever, seen, but on about the 8th or 9th day a secondary umbilication or flattening takes place and is due to resorption of fluid.

The eruption is subject to variation but broadly speaking two main types are distinguishable; the one type being finer and more closely set, and the other being larger and more distinct. Sometimes both types are found in the same patient, the vesicles then presenting a very unequal appearance. The finer eruption has far less tendency to form thick pus but the general course was similar to the larger variety.

A number of confluent and 2 Hæmorrhagic cases occurred in this series; (altogether 4 cases of Hæmorrhagic rash have been brought to my notice all occurring in women 6-7 months pregnant, and all fatal.)

THE DISTRIBUTION OF THE RASH

Appearance.—The rash makes its appearance or, at all events, is first noticed in certain positions. These are in order of frequency, the face, especially the forehead, and the dorsum of the wrist or forearm.

Of the 202 cases the location of the onset as noticed by the patient was as follows:—

Face	..	..	120
Wrist & forearm	..	..	52
Both arm & face	..	..	27
Scrotum	..	..	1
Inner side of knee	..	..	1
Elbow	..	..	1

Although in heavier cases the whole body may be covered, the rash shews a predilection for certain areas. It tends heavily to affect the face, the lower half of the back and the arm and forearm, especially towards the wrists.

The Scalp.—The rash was present on the scalp in all cases examined; the lesions, however, were often few in number.

The Mouth.—Pocks were frequently seen on the hard and soft palate and to a less extent on the pillars of the fauces and the inside of the cheeks. In 4 cases the fraenum of the tongue was also affected.

Larynx.—Hoarseness of voice and sometimes aphonia were present in the majority of the severe cases and in a fair proportion of the other cases. Mirrors, etc., for Laryngoscopy were not available but in three of the cases pocks were present in the larynx and trachea—post mortem.

Palms and Soles.—In all the 202 cases pocks were seen on the palms and soles. In some the incidence here was very heavy and caused much pain and discomfort. No lesions under the nails were noticed.

The Genitals, especially the prepuce, were often affected and there were in a few cases much swelling, and pain and difficulty of micturition.

* * * * *

L. M. MOODY.

Tuberculosis.—During the period under review 691 cases of this disease were reported to the Central Board of Health, under Law 31 of 1912, as against 788 for the year 1919-20.

The establishment of a tuberculosis hospital is still engaging the attention of the Government, and it is hoped that when a suitable site is selected and money available, the scheme will be put into operation.

Yaws.—The intensive treatment of Yaws with the Salvarsan preparations is giving the most successful and satisfactory results met with in Tropical Medicine.

A D.M.O. of considerable experience in a special report on this subject states: "I will add that Salvarsan treatment as now carried out for Yaws is undoubtedly the greatest blessing that the peasants of this Island have ever received." It is confidently expected that in a few years Yaws, if not eradicated, will be so under control as to be practically negligible. The percentages of recurrences and reinfections out of 26,448 treated, have been extremely low.

Venereal Disease.—Treatment of this disease continues but to a limited extent. Persons suffering from the disease are treated free by the D.M.O.s. and treatment is also given at the Public Hospital, Kingston, where night clinics have been established on 2 nights in each week.

Unfortunately, neither Syphilis nor uncomplicated Gonorrhœa gives rise to much pain and the treatment is as a rule considerably more painful than the disease. It is the experience of all D.M.O.s that individuals suffering from Venereal Disease rarely if ever apply for treatment in the early stages, and as soon as their acute symptoms are relieved, demand discharge if patients in hospital, or do not continue treatment if attending as out-patients, thereby spreading Venereal Disease. This failure to get cured, is in my opinion, one of the main causes of the prevalence of these diseases in this Colony. Considerable public interest was manifested in the matter during the period under review. A Commission appointed by the National Council for Combating Venereal Disease visited the Colony in Sept., 1920. The Commission was under the auspices of the Colonial Office, London, and consisted of Dr. Wright and Dr. Letitia Fairfield.

The Commission was brought into touch with the Hospital authorities in Kingston, and in some of the country institutions and a series of lectures and demonstrations were given to Medical Practitioners and Nurses as to the latest developments in the treatment of this disease.

A large amount of educational work was done by the Commission in conjunction with the Clergy, School Teachers, and Jamaica Social Purity Association, which latter society is now actively engaged in carrying out the propaganda work indicated by the Commission.

The Society has exhibited great interest in the matter, and it is hoped that their efforts will be rewarded with some success. But the problem is a very vast one and to adopt active curative measures

for the treatment of Venereal Disease requires the expenditure of a large sum of money. Unfortunately at the present moment the financial conditions of the Colony render this impossible.

With regard to Prophylaxis against Venereal Disease, this may be divided into measures to be taken:

A. Before exposure to infection,

B. Immediate disinfection after promiscuous sexual intercourse,

but their efficacy is dependent largely on drugs being properly and skillfully applied, and the care and thoroughness in which the disinfecting process is carried out. The absence of these essential precautions nullify the effects of prophylaxis and may tend to give rise to a false sense of security.

Ankylostomiasis Hookworm.—The Campaign against Hookworm has been actively pursued by the Rockefeller Foundation, under their capable and energetic representative, Dr. B. E. Washburn.

A report by this Officer follows, as also a report by Dr. M. T. Cassidy, on the work of the Vere Hookworm Unit.

A Sanitary Survey of the Parish of St. Catherine was instituted during the year. The parish was divided into 4 areas, for the purpose of the provision of approved latrines prior to the treatment campaign by the Rockefeller Foundation.

The other parishes have expressed the desire for the Campaign to be extended to them and as soon as funds are available for the sanitation of all districts in the Island there should be nothing to prevent a general Campaign.

The Rockefeller Foundation have agreed to considerably increase their medical staff when conditions are such as permit of the extension of their existing organisation. This will happen when the other parishes have effected a system of conservancy and are thus ready for the commencement of treatment

REPORT OF THE JAMAICA HOOKWORM CAMPAIGN FOR 1920.

1. *Object of the Jamaica Hookworm Campaign.*—The object of the Jamaica Hookworm Campaign is to co-operate with the Government Medical Service in demonstrating the importance of hookworm and the other soil pollution (bowel) diseases; in showing the necessity for the control of these diseases; and to devise practical methods for such control, hookworm disease being taken as a type of this class of disease.

The definite work of the Campaign is to examine the population of selected areas and to give treatment to those who are found to be infected; also, to teach the people the necessity for using the latrines which had been erected before the beginning of the Campaign through the influence of the Central Board of Health.

2. *Staff Organisation.*—The budget of the Jamaica Hookworm Campaign for 1920 provided a staff consisting of a medical director, three clerks, four microscopists, ten dispensing nurses, and two caretakers; a total of twenty members. During the year only about two-thirds of the full-sized staff was utilized as the sanitary work did not progress fast enough to justify the employment of the full number of assistants. The medical director is provided with an automobile and each nurse is required to possess and use a bicycle. The members of the staff are required to live in the area in which the Campaign is being conducted.

3. *Routine Method of Work.*—The parish in which the Campaign is being conducted is divided into areas. An area is divided into districts, each of which consists of a village or settlement of from 500 to 700 people; and each such district is placed in charge of a dispensing nurse who is held responsible for the work of his district. Before a nurse begins his work, lectures illustrated with either the magic lantern or charts, are given by the medical director at the schools and other public gathering places.

In carrying out the work in a district the nurse goes from home to home, marking each house with a number; and he records the name, age, sex, of each inmate. A small tin box (container) is left for each person, with instructions for the preparation of a specimen of bowel material for microscopic examination. These specimens are collected on the following day by the nurse. At the time of these first visits the nurse takes time to explain at each home the details of hookworm disease and its prevention. For this work he is supplied with an album of local photographs which shows in detail the ways the disease is contracted, its effects on the patients, and the results following treatment. Visits are also made to each district by a microscopist who takes his microscope from house to house and demonstrates the eggs and larvæ of the hookworm in order to emphasize the necessity of using the latrines.

The specimens collected by the nurse are brought to the central office laboratory for examination. The microscopical work is carefully supervised and the most improved technique is used. Each specimen is examined by at least two microscopists and, in every case, the results of each assistant are verified.

Nurses are required to make daily reports and complete records are kept of each case. A treatment book is prepared by the clerks and those who are found to be infected are visited by the Medical Director, and each patient is "sounded" (examined with the stethoscope) and prescribed for individually. The treatment is carried to the people in their homes and each patient takes his medicine in the presence of the nurse, to ensure correct dosage and results. A person is pronounced cured only after a specimen, submitted at least one week after treatment, is found by careful examination to be negative. After being cured a patient is given a certificate such certificates also being given to those found not to have hookworm.

4. *Areas of Operation.*—The work of the Campaign during 1920 was conducted in the Vere and Race Course Areas of Clarendon Parish and at Spanish Town in St. Catherine Parish. The Campaign opened in November 1919 in the Vere Area and was continued there until March 31, 1920.

On April 1, 1920 the offices were moved to Race Course the centre of the large Race Course Area; and the work in this Area was continued until the end of the year. By December 1 the work in lower Clarendon was completed, except in the districts of Four Paths and Content, and the main offices moved to Spanish Town.

As the sanitary work in the Spanish Town Area was not completed by the end of November, as was anticipated, the month of December was spent in examining the inmates of the Rio Cobre Children's Home and the St. Catherine Poor House.

5. *The Vere Area.*—The people of the Vere Area are mainly Creoles and East Indians; 3,452 creoles and 1,480 East Indians were censused during the campaign. The majority of the East Indians live on the estates, though quite a number of Indian families are found in the villages. The estates, it might be well to mention, also have barracks for labourers.

Taken as a whole the results of the Campaign in the Vere Area are very gratifying. The estate owners and managers have expressed themselves as being highly pleased with the benefits of the treatment for hookworm disease and of the increased working ability of their employees. Also, the institution of sanitary latrines has greatly lessened the incidence of dysentery, typhoid and other bowel diseases.

In January 1920 the Vere Estates employed a full-time sanitary inspector, who was given statutory powers, to work on the estates and neighbouring villages. In May an additional assistant sanitary inspector was employed and routine post-campaign hookworm work was instituted under the supervision of Dr. Cassidy, the Medical Officer of Health. This post-campaign work consists of making examinations and treating the infected at estate barracks and villages in addition to regular and systematic sanitary inspection.

A summary report of the work accomplished in the Vere Area follows:—

6. The Race Course Area.—The Race Course Area lies directly west of the Vere Area and consists of a number of scattered villages, cattle pens, and estates in the large territory composing the south-western part of Clarendon Parish. Because of the great distance between the districts of the area it was found necessary to establish a number of branch offices in addition to the main office and laboratory at Race Course village. The following estates were included in the Area: Ashby Hall, Exeter, Springfield, Budleigh Park, Rowington, New Yarmouth, Old Yarmouth, Sandy Gully, Parnassus, Denbeigh, and Woodleigh, (a tobacco plantation.) The villages visited by the Campaign were Water Lane, Gibb Town, Race Course, Top Hill, Kemps Hill, Manningsfield, Pond Pasture, Scipio Foot, Gie-me-me-bit, Grimmett, the three Hayes villages, Bowens, Sedge Pond, Clifton, Milk River Rest, Gravel Hill, York Pen, Comfort, and Four Paths. The majority of the people of the Race Course Area are Creoles, though a number of East Indians live at the estates as well as in the villages of Kemps Hill, Manningsfield, and Gie-me-me-bit.

The educational work in the Race Course Area consisted of magic lantern and chart lectures, album explanations, microscopic demonstrations, and the use of handbills and circulars.

As a result of this intensive educational work the co-operation of the people was exceptionally good. In this area, as was the case in the Vere Area, the estate managers expressed themselves as being highly pleased with the results of the hookworm campaign in that it increased the efficiency of their labourers. Many labourers now earn double the wages they received before treatment and many are now able to work who formerly were invalids. The interest of the people in building their own latrines was also gratifying.

Although the infection in the Race Course Area was not high, the Campaign resulted in creating, in a measure at least, a sanitary sense among the people. The improved sanitation and the removal of mass infection, with the dryness of the area, should make the results more or less permanent. The Government has not yet instituted post-campaign work in this area; but if such work is instituted in the near future it should be easy to control the spread of the bowel diseases.

A detailed statistical report of each district of the Race Course Area follows:-

Nurse.....	Race Course.....	Dist. No.)
Date.....	192.....)	
	Infected	Treated	Cured 1,425
	1797	1640	Removed 80
			Medical Reasons 14
			Refused 1
			Under Treatment 120
			Medical Reasons 66
		Not Treated	Removed 81
		157	Refused 4
			Died 1
			Not located 5
	Examined	Not	
	8,747	Infected	
Census		Removed	55
8,836		Refused	4
		Not located	18
		Not classified	9
	Not Examined	Died	4
	89		

7. The Spanish Town Area.--St. Catherine Parish was selected as the territory in which the hookworm campaign was to be conducted after the completion of the campaign in lower Clarendon Parish, and the selection was approved by the Central Board of Health on June 16th 1920. Because of the fact that Spanish Town was already supplied with latrines and the sanitary work would consist of correcting defects rather than the building of complete latrines, this place and its suburbs were chosen as the first area in St. Catherine. The Superintending sanitary inspector with his assistants moved into the area on the 8th September, 1920, in order to complete the sanitary work and allow the treatment work to be inaugurated on the 1st of December.

In anticipation of beginning the treatment work in December, the main office was moved to Spanish Town at the end of November. It was found, however, that the sanitary work had not been completed and that the area would not be ready for the campaign before the end of January. For this reason examination and treatment were given at the Rio Cobre Children's Home and the St. Catherine Poor House during December. This work will be continued during January and, also, arrangements have been made for the examination and treatment of the prisoners at the St. Catherine District Prison.

At the Rio Cobre Home sixty-five of the seventy-two inmates were found to be infected with intestinal parasites, as follows:—

sites, as follows:	
Hookworm	32
Ascaris	13
Trichocephalus	49
Strongyloides	1

In some cases the same child was found to be infected with three different kinds of parasites. Hemo-globin tests showed a marked anemia in the children infected with hookworm. The Tallquist Scale was used with the following findings:—

2 children showed 50% hemoglobin;
15 children showed 60% hemoglobin;
12 children showed 70% hemoglobin;
3 children showed 80% hemoglobin.

At the Poor House 161 of the 170 inmates were examined, those not examined were suffering from acute illness. Of the ones examined, 80 were found to have hookworm.

Infection with other parasites was as follows:

Ascaris	31
Trichocephalus	63
Strongyloides	9

8. Educational Work.—As has already been stated, a large part of the treatment campaign was devoted to educational work, and this feature of the campaign was attended by much success. Lectures, with magic lantern slides, were given in each village by the medical officer and pamphlets and leaflets were distributed at the houses and schools. On Sunday, the one day of the week when nearly everyone can be found at home, the medical director, clerks, and microscopists visit the districts for the purpose of conducting detailed educational work. Chart lectures were given at prearranged centres, whenever a dozen or more people could be brought together, and specimens of hookworms and other parasites were shown. The microscopes were used to demonstrate hookworm eggs and larvae and to impress upon the people the necessity of using the latrines which the Government had caused to be built at each home. Infected persons were also seen and "sounded" in those Sunday morning visits by the Medical Director.

In the work of the treatment campaign in the Vere and Race Course Areas the detailed educational work was more successful—it was highly popular. The people were interested and eager to attend the lectures, often coming from villages miles away; and as a result they gave their specimens and took their treatments very readily. They also showed great interest in sanitation and many householders provided latrines of a better type than the type built by the Government.

It was very pleasing to find that all classes can be reached by properly adapted educational work and that the results of teaching the people the details of hookworm disease and sanitation caused more thorough and willing co-operation. The beginning of a sanitary sense has been created in the Vere and

Race Course Area and if the Government can arrange for systematic inspection work in all parts of those areas, such as has been introduced by the Vere Estates Company in their districts, this sanitary sense will last and exert itself and guarantee better health and greater prosperity to the people. And this will make them better citizens.

B. E. WASHBURN,
Director of the Campaign.

HOOKWORM CAMPAIGN IN THE VERE DISTRICT.

Lionel Town Hospital, Alley P.O.,
April 21st, 1921.

Hon. S.M.O.

Sir,

I have the honour to forward the following report dealing with the work of the Vere Hookworm unit from July 1920, to December, 1920.

The International Health Board began the demonstration campaign in October 1919, and it became evident that if any permanent benefit was to be expected from the initial stages of the work, it would be necessary to follow up the Campaign locally. It was apparent that the work of the Rockefeller Foundation Representative would be rendered migratory, if no steps were taken, at the conclusion of his campaign to carry on the work, for it is well known that Hookworm eradication, or a reasonable measure of control, can only be achieved by continuous effort, spread over a period of some years.

In April 1920 Dr. Washburn completed his campaign in the Lionel Town Area, and every home, and all the estates in the Area, were provided with latrines. The whole population had been dealt with and Hookworm disease was temporarily eradicated. The situation was explained to Mr. A. W. Farquharson, and it was pointed out that unless an intensive campaign was undertaken in which the development of sanitation would be insisted upon, the district would relapse into its original condition, in which the infection rate was 42.4%.

In July the Vere Hookworm Unit came into existence and the whole expense of the unit is being borne by Amity Hall Co., Ltd., Messrs. Lindo Bros., and the Vere Estates Co., Ltd. The unit consists of a Medical Officer, a Sanitary Officer and a Hookworm Officer.

The object of the work was to cover the area dealt with by Dr. Washburn, to examine every inhabitant, and to develop sanitation. Each village and estate in the area was dealt with in detail. The campaign began at the Amity Hall group of estates in July, when a census of all the cane farms was taken, and arrangements made for the microscopic examination of a specimen from each inhabitant. Six months had elapsed from the completion of Dr. Washburn's work on the cane farms. It was found that the percentage of re-infection reached 18.4% while the original infection rate was 45.12%.

No difficulty was experienced in collecting specimens, and those infected accepted treatment readily. In every case the diagnosis was made microscopically, and no case was considered cured, until the microscope confirmed the cure. A similar procedure was followed throughout every stage of the campaign, and in no case was any difficulty experienced in carrying out the work. The treatment in every case consisted of the administration of Thymol and Compound Jalap Powder, without Ginger. Thymol was found to give more satisfactory results as no unpleasant consequences resulted from its use. It is in my opinion most suitable for intensive work on a large scale, as Chenopodium is apt to give rise in an appreciable number of cases to unpleasant symptoms, and is slower in its action in removing the parasites. This last is an important consideration, for the Thymol treatment acts more rapidly and enables one to re-examine stools a week after its administration. When Chenopodium is given it is unwise to re-examine stools until a fortnight has elapsed.

The substitution of Compound Jalap Powder for the Epsom Salts saves time, for the Jalap Powder can be given along with the Thymol, and the necessity for administering purgatives after the exhibition of Thymol is obviated.

The routine treatment was, the administration of an initial dose of 60 grains Jalap Powder in the evening, followed by 40 grains of Thymol and 60 grains of Jalap Powder divided into two doses, on the following morning. In the case of children who were unable to swallow Capsules, the treatment was given in Condensed Milk or Honey, and was taken readily.

Attention was given to the sanitary side of the work for the two subordinate Officers regularly inspected all the latrines within their area. Prosecution for soil pollution, and non-use of latrines were obtained and also a considerable number for failure to keep latrines in a sanitary condition. During the progress of the work it became evident that the only type of latrine which is within the financial resources of the people and which will be used, is the pit latrine. The bucket type of latrine in rural districts is not to be recommended for, in the rare instances in which it is used the contents are usually thrown into an adjoining lot, and soil pollution continues. There is evidence of increasing use of the pit type, and with the development of educational influence, and if the sanitary laws are enforced, it is reasonable to hope that Hookworm Disease will be controlled.

The campaign has a much wider aspect than the mere control of Hookworm, for with the more regular use of latrines, the typhoid fevers, and the dysentries will also pass under control. The following tables deal with actual details of the work and show that there has been a notable reduction in the incidence of Hookworm infection. The original infection rate was 42.4% while the rate disclosed by the past campaign was 9.5% but this is not the only gratifying feature of the work for it was found that the great majority of our cases were cured by two treatments, and in no case more than 4 treatments were necessary.

In Dr. Washburn's series of cases, 386 cases required 4 treatments for cure, while 194 others required from 5 to 9 treatments before a cure could be demonstrated. This is important for these figures not only

indicate a notable reduction in the incidence of the infection, but emphasize the fact that heavy individual infections have been stamped out.

In conclusion I have to record my appreciation of the work done by Mr. S. R. Nelson, who not only did the bulk of the microscopic work but has been mainly responsible for our success in other directions.

In the tables which follow it will be noted that there is a considerable difference between the Rockefeller census and that of the Vere Estates Campaign. This is accounted for by the fact that the Rockefeller work was done during crops, when a large amount of casual labour is attracted to the district, while our work was done when the crop was finished.

THE VERE ESTATES CAMPAIGN FIGURES 1920.

		Pop.	Exam.	Positive	Treated	Cured.
Amity Hall	..	655	630	116	110	110
Moneymusk	..	454	454	37	36	36
Moreland	..	623	605	76	71	69
Lionel Town	..	560	525	44	43	42
Mitchell Town	..	620	610	27	26	24
Portland	..	715	700	44	40	38
		3,627	3,524	344	326	319

ROCKEFELLER FIGURES 1919-20.

		Pop.	Exam.	Positive.	Treated	Cured
Amity Hall	..	981	975	460	434	397
Moneymusk	..	632	621	336	310	262
Moreland	..	701	698	473	434	392
Lionel Town	..	701	700	308	294	284
Mitchell Town	..	718	711	191	168	149
Portland	..	871	857	172	153	135
		4,604	4,562	1,940	1,793	1,615

I have the honour to be,

Sir,

Your Obedient Servant,

M. T. CASSIDY.

GENERAL SANITATION.

In the interesting report by Dr. L. Gifford, D.M.O., the health conditions existing in Kingston during the year under review are very clearly indicated.

It cannot be said that general sanitation is at present at a high standard, but the Parochial Boards have, as a rule, been most active and energetic in carrying out any measures that have been recommended having for their object the prevention of disease and also in carrying out the provisions of the Health Laws in times of epidemic.

The Medical Commission gave special and careful consideration to the establishment of a Department of Public Health that would provide for the provision of a properly qualified Sanitary Staff in each parish of the Island, and to a system that would effectively carry out the sanitary needs of every district and for arresting the spread of disease.

It was the opinion of the Commission that a Medical Officer of Health whose whole time should be devoted to the discharge of his duties should be appointed for each parish. With such an Officer, and with a competent subordinate staff it may confidently be expected that a considerable improvement in general sanitation will result in much benefit to the public health.

Kingston, 24th June, 1921.

Sir,

I have the honour to forward this my report on the Kingston Medical District for the Calendar Year ended 31st December, 1920.

During the first quarter of the year the health of the District was fairly good; but as time went on sickness of various kinds became more and more prevalent until September when both the morbidity and mortality rates were very high. The deaths for the quarter exceeded the number of births by no less than 52, 232, 180. Apart from the Epidemic of Alastrim beginning in May and lasting until the end of the year, Measles, Whooping Cough, and other infective diseases as well as bowel complaints were unusually prevalent. To my mind the year 1920 will always rank as a very remarkable year—as illustrating the close and concurrent relationship between wealth on the one hand and poverty on the other. As far as my experience goes, I know of no year in recent times in which there was so much money in Kingston (I don't say wealth) and at the same time so much stark, abject poverty. This statement may seem paradoxical but it is none the less true. Let us hope that with the return of normal times

in financial matters, health conditions will share in the readjustment. A factor which, I think contributed to the unsatisfactory public health of Kingston during the year under review was the almost unprecedented drought which prevailed, restricting the water supply and allowing full play to the dust, which is not only our greatest nuisance but one of our greatest dangers for obvious reasons.

2. As regards the Sanitary conditions of the district, my remarks in my last year's report still apply generally. The additional source of water supply therein foreshadowed has not yet become an accomplished fact nor could this have been reasonably expected, for the Kingston General Commissioners could hardly have embarked on such an expensive and ambitious enterprize at a time when they, along with the Mayor and Council, are in the melting pot. The scheme however, will have to be taken up and carried through in the near future.

Connections with the Water Carriage system were made from time to time during the year in the same desultory manner as in the past, but a regular systematic process of superseding the conservancy system of refuse disposal by the more sanitary and satisfactory one of water carriage has not yet commenced. The advent of that day will be hailed by every enlightened citizen of Kingston.

Overcrowding and bad housing are as much in evidence as ever and no improvement in these respects are discernible as yet. It is to be hoped that the Housing Commission now sitting will be able to propound some scheme acceptable and possible of achievement which will effect substantial improvement in existing conditions.

Anti-malarial measures received and are receiving careful and systematic attention at the hands of the Medical Officer of Health and his staff.

3. I know of no Sanitary Improvement made either by the Mayor and Council or by private individuals during the year under review.

4. As regards mortality, the highest rate was reached in the Autumn, 232 deaths being registered September. The chief killing diseases were those connected with the digestive and respiratory systems, and also Enteric Fever. The following are the figures.

Diarrhoea and Enteritis .. .	222
Dysentery .. .	85 .. 307 Digestive
Phthisis .. .	258
Enteric Fever .. .	130 .. 388 Respiratory

In contrast with these figures, the 15 deaths recorded under the head of Alastrim seem trivial and insignificant. It is difficult to appreciate or even to understand the attitude of mind which become panicky over the latter, while the former, veritable destroying Angels, are regarded practically with equanimity, if not with indifference; and these, be it remembered, due to defective sanitary conditions and distinctly preventable.

The death rate compares very unfavourably with that of the previous year, being 34.92 per 1,000 as against 26.86 per 1,000. In this connection I attach a cutting from the London Weekly Times of the 4th February, 1921, which is interesting.

Infantile Statistics are as follows:—

Births registered .. .	2,218
Deaths under 1 year .. .	502
Mortality Rate .. .	22.63 per cent.

This does not make cheerful reading and seems to call for the activities of the Child Saving League and of every one interested in the growth of the population.

5. With respect to Meteorological conditions, the year was one of almost continuous dry weather and high winds. The rainfall for the 12 months was only 9.11, the average of the past 49 years being 33.59. As a result of the drought and consequent scarcity of water, the watering of the street was perforce neglected and the resultant dust caused a considerable amount of throat and eye affections.

6. Referring to Infective Diseases, Measles, Whooping Cough, Mumps, and Chicken Pox occurred from time to time, especially the first named, which was very prevalent, particularly during the last month of the year. But the infective disease par excellence of 1920 was Alastrim or Kaffir Pox, which commencing in May, probably introduced from Cuba continued into 1921. I have not the exact figures, but the number affected must have reached nearly 3,000. In the summer and autumn the city was in the grip of a wide spread epidemic. While the infectivity of the disease was of a marked character, and its symptoms, in some instances, severe, the mortality was trivial, only 15 deaths recorded. Its invasion caused a good deal of discussion and excitement, and at one time its presence threatened to create a panic, especially amongst those who feared and stated that we had nothing more or less in our midst than the justly dreaded Small Pox, but thanks to the attitude of the Central Board of Health, who refrained from being frightened and refused to be stampeded, keeping a temperate brain throughout, matters eventually righted themselves. By the end of the year the disease was on the wane and the nerves of the alarmists and alarmed had recovered their tone. As I write the city is free of Alastrim which, however, still prevails in some of the parishes. The question which is now being discussed is the somewhat sordid one of fees and honoraria—the usual matter of epidemics in Jamaica.

7. The juvenile population may be said to be fairly well protected from Small Pox, regular weekly vaccinations were performed by the District Medical Officer, the total number amounting to 1,832; while the Medical Officer of Health for Kingston and private practitioners did a considerable number. There was unusual activity in this respect during the year, in view of the presence of Alastrim against which vaccination is distinctly protective. Many adults availed themselves of re-vaccination as a result of the epidemic, and so it may, I think, be fairly claimed that Alastrim has done us a good turn in increasing the protection of the population against the far more dangerous disease of Small Pox.

8. Yaws does not exist in this District.

9. I have no means of knowing definitely the extent to which Hookworm exists here, but I do not think there are many cases outside the General Penitentiary whose population is recruited from all parts of the Island.

10. There are not many Lepers in Kingston. Those affected are kept properly isolated, as far as I know.

11. Dysentery has been fairly prevalent. Of the exact number of cases I am not certain, but the deaths registered under this head amount to 85.

12. As regards Pellagra, I personally saw only 5 cases, but this is no correct indication of the extent to which the disease prevails. I think the records of the Lunatic Asylum would tell a different tale.

13. No case of Ackee Poisoning came under my notice.

15 & 16. Venereal Diseases were, so far as I am able to judge, as prevalent as ever; and, while I am not prepared to assert that they are increasing (I am without any definite statistics on the point) I think I am quite safe in venturing an expression of the opinion that they are not decreasing; nor can this be reasonably expected, until a more thorough and comprehensive method, than that which now obtains, of dealing with them is initiated and vigorously prosecuted.

The usual statistical returns are forwarded herewith.

I have the honour to be,

Sir,

Your obedient Servant,

LAWSON GIFFORD, D.M.O.

The Suptg. Medical Officer.
Kingston.

Port Antonio,
25th April, 1921.

Sir,

I beg to submit the following Report relative to the health conditions, that obtained in my District, during the past Calendar Year, called for by Circular No. 1092 dated 1st ultimo.

As regards the prevalence of sickness in the different seasons of the year, the only noticeable feature in this connection, was the increase in the number of malarial cases during the Summer months. The disease generally was mild but now and then a severe case came under my observation.

Relative to Paragraph 2 the Sanitary Conditions of the Chief Towns, &c., in the District, this has been exhaustively dealt with in submitting this Report in other years and there is nothing new to add. No new works have been carried out, that would tend to improve Public Health Conditions.

Under the sub-heading of Water Supply, attention was directed to this important matter during the last 9 months of 1920 by the severe drought that prevailed. The necessity for an additional supply was recognised, and I am not aware that any steps have been taken to meet another such occurrence.

The same primitive system, of disposing of night soil is still in vogue. The persons engaged in this unpleasant work, are supposed to empty the buckets in certain places but I question whether the regulations are followed very strictly, nor are they followed as regards the use of covered retainers.

The town is comparatively free, one might almost say singularly free, from mosquitoes, this is to be wondered at, considering the low-lying nature of much of the land in its neighbourhood and of a considerable portion of the town itself.

I mentioned above, that no new works have been carried out with a view to improving Sanitary Matters, this had reference to the Governing Authorities. The United Fruit Co. has not been idle, much has been done at Bound Brook, to get rid of mosquito breeding areas, for low-lying lands have been filled in and concrete gutters constructed to carry off storm and other waters.

The death rate was fairly uniform throughout the year, during the summer months there may have been a slight increase, but hardly a sufficient increase to call for remark.

The unprecedented drought was the only unusual meteorological feature that requires comment. It began in February 1920 and lasted practically a year. There was an increase in the number of intestinal cases in the Hospital and Poor House, otherwise, I do not think the sick rate was affected by it.

The Alastrim Epidemic began in July—that is—the first cases that came under my observation were seen during that month; it is still going on, although there is every indication it is on the wane. The M.O.H. informs me that 351 cases have occurred in this District. One death only has resulted, this happened in the case of an unvaccinated young woman, who was admitted to the Hospital suffering from the vomiting of pregnancy, her symptoms being so severe in this connection, that an abortion had to be produced; she subsequently developed Alastrim involving the mouth, throat, nose, etc., interfering with her taking nourishment which brought about a fatal result. This case was fully reported at the time it happened.

I have always been opposed to making so much of Alastrim, it kills no one, and to my mind, except for the longer duration, is no worse than a bad attack of coryza, and yet this parish has been let in for a matter of £2,000 (so far) in connection with it. This by no means represents the total loss to the community, many tourists have been kept away by the publicity given to the epidemic, I don't think I am exaggerating when I say, that each visitor is good for £5 to the people of the town (for bus hire, purchases made in the stores, etc.) apart from the large amount spent in the Hotel, this has all been in abeyance owing to the small number who came here.

Had the publicity done anything towards lessening the incidence of the disease, the Public could have been congratulated; 351 cases in this District is the record. During the Small Pox Epidemic of 1887-88 with a much more virulently infective disease, there was a total of 28 deaths in the same area.

There is one redeeming feature in connection with the Epidemic, that is, the impetus given to vaccination, persons who were strenuous objectors, to this simple protective measure, came forward and absolutely begged for it; the result is the district is protected now, as it never was before against Small Pox. A very considerable number of the persons operated on were adults.

The treatment of Yaws by means of one of the "Salvarsan" preparations has been carried on as vigorously as possible, 813 persons were treated at Out-stations during the year, this was in addition to 95 patients admitted to hospital specially for treatment and another 250 who were admitted for other ailments and were found to be suffering from Yaws, in addition to the ailment for which they were admitted, making a total of 1,158. All the cases treated were symptom cured and a very small percentage were recurrences in persons who had been treated during the previous year. It is hardly to be expected that a single dose will, in all cases, cure an ailment that has been going on for years. The most intractable are those suffering from Yaws Ulcers, who while uncured are a source of danger in view to their liability to infect health persons.

As regards Hook-worm disease, it is impossible to give the actual number of persons suffering from the trouble in the district. Eighty odd persons were treated in the hospital specially for ankylostomiasis. It is my practice to treat practically all hospital patients with Chenopodium, it is out of the question to make a microscopic examination in every case. I have never found that any harm has resulted from the practice and the benefit frequently is little short of marvellous.

No one suffering from Leprosy came under observation during the period under review and I am not aware of any one suffering from the disease in the district.

Regarding the presence of hookworm among the inmates of the Poor House, they are all no doubt infected, as a matter of routine they are all treated with Chenopodium.

Pulmonary Tuberculosis was responsible for the death of 16 of the inmates of the Poor House last year and at its close there was one case of laryngeal tuberculosis there. None of them contracted the disease in the Institution; they were all in the advanced stage when taken in and were admitted, as they were incapable of caring for themselves and had no one responsible for their care and maintenance.

Dysentery has not been prevalent to any great extent. During the height of the drought several cases occurred in the hospital, none fortunately ended fatally, they were all of the amoebic type.

It is not surprising that cases did develop there (in the hospital) having in mind the highly insanitary conditions that obtained, owing to the absence of water for flushing the closets. The water was on for an hour each day, there is no reservoir worthy of the name in connection with the place—and as a matter of fact there was no reservoir of any sort for a considerable time—the condition of the latrines, with over 100 persons using them can be easily imagined. Although frequent representations were made, beginning in June, nothing was done to improve affairs, it is a matter of rare good luck that a more serious epidemic did not occur.

No cases of Pellagra were seen.

No case of Ackee Poisoning or the so-called Vomiting Sickness applied for treatment. A post mortem examination was made on the body of a semi-adult female in March, that presented all the characteristic appearances found by Dr. Scott in his investigations of Ackee Poisoning; there was no history of Ackees having been eaten but there were trees laden with the fruit growing in the neighbouring yards.

There has been a marked increase in the number of Venereal Cases, both Syphilis and Gonorrhoea showing a much larger increase than any previous year.

Syphilis was accountable for 114 admissions and Gonorrhoea for 131.

I have never been in favour of the free treatment of those diseases, in my opinion it is simply encouraging people to be immoral, and is it fair to the honest tax-payer, to make him pay to get his loose fellow better. If free treatment was showing any results towards the lessening of the number of cases, there would be an argument in its favour but the contrary holds and a striking feature about it is the large number of very young people who contract the disease. I estimate the cost of the Maintenance of the Gonorrhoeal cases in the Hospital at £300, no objection could be taken to this, if any good was resulting from it, but what happens is that long before a patient is better he asks for his discharge to go out to spread the disease broad-cast.

Some six cases of Cerebro-spinal-meningitis were admitted to the wards of the Hospital, there was no question as to the diagnosis, as in those cases where a spinal puncture was not done, the diagnosis was subsequently verified by post mortem examination. It is a new disease as regards Hospital Records, as I have no recollection of having treated cases before, certainly not six in a single year. While on service I saw a fairish number of cases among the B.W.I. troops serving in Flanders and Italy, particularly in the latter country, it has occurred to me that this might be an aftermath of the war, I am bound, however, to say that none of the sufferers had been abroad, or had had any connection with the Army.

I have the honour to be,
Sir,
Your obedient servant,
C. A. Moseley, D.M.O.

Buff Bay, April, 15th 1921.

Sir,

In accordance with your request contained in your Circular (Annual Report) No. 1092 dated 1st March, 1921, I have the honour to now submit my Annual Report on the Medical District under my charge for the Calendar Year ended 31st December, 1920.

1. Prevalence of Sickness:

(a) Malarial Fevers were very prevalent in the months of November and December, the months of heaviest rainfall. They were chiefly of the benign type due to the Tertian Parasites.

(b) Enteric Fevers, have been endemic throughout the year. The months of greatest incidence however were April, and October. There were 47 cases during the year with 10 deaths, a mortality rate of approximately 21%.

(c) Pneumonia—39 cases during the year. The months of greatest incidence being June, July and August; there were 3 deaths, a mortality rate of 7%.

(d) Alastrim—Became epidemic during the month of October, gradually waned during December and with the return of the disappointed and deluded Bedwardites re-assumed epidemic form in January.

So far as I know the condition at the end of the Calendar Year showed little, if any, abatement in its spread. The mortality rate of the condition appears to be practically nil. I have no figures before me which would enable me to give any definite information as to the number of cases which have occurred in the district.

(e) *Dysentery*—Only 8 cases during the year and no deaths

(f) *A new Disease*—which tentatively I have diagnosed as "Infective Stomatitis" characterised by Sore Mouth, of varying intensity, but affecting chiefly the angles of the mouth, the Mucous Membranes of the lips and gums, sore eyes, varying from a mild catarrhal conjunctivitis to a wide-spread purulent Ophthalmia, with some degree of fever varying from 99% to 101%, accompanied by Constipation usually but rarely by Diarrhoea and followed in from 2 to 3 weeks by a severe form of "Neuritis" which has been observed to affect chiefly the lower extremities, producing numbness and pain, loss of power, high slipping gait, loss of tendon reflexes, no affection of sensation, except a slight diminution of the heart sounds, sometimes severe "girdle pains" around the lower part of the chest and upper portion of the abdomen, and sometimes by marked affection of Speech, and nerve rarely still by affection of vision. Commenced to show itself in Charles Town and Swift River during the month of January and to spread rapidly therefrom to the other districts, so that by the end of March the condition was very wide-spread over the entire medical district. This condition appears to be identical with the Epidemic which occurred at Spanish Town in 1918, and which was investigated by Dr. Scott, who seemed to regard the condition as a "Central Neuritis" of toxic nature due to the growing and eating of Sugar Cane. My observations, however would not seem to support this finding. I believe the condition to be an infection primarily, and the subsequent Neuritis to be due to bactericidal toxins. There have been very many cases of the condition with two deaths known to me; one died of intractable complicating diarrhoea. The other of cerebritis by spread along the optic tract from a severe purulent ophthalmia.

2. *Sanitary Conditions*—(1) Water Supply. This remains in as unsatisfactory a condition as heretofore. The chief towns of the district derive their supply from wells, for the most part shallow and neighbouring closely upon pit closets. The villages, from the many rivers and springs with which the district abounds and which are in no way protected, and consequently are liable to, and must be largely polluted. As to quantity in times of drought, such as obtained from April to July of the year now under review, the danger of a water famine in the towns of the district, is a very real one. It appears so much to be a waste of time reiterating year after year, without any practical results obtaining, the same comment relative to this essential feature of health and existence I abstain from repeating again the remarks contained in my reports for many years past.

There are no Public Tanks in the district.

2. *Disposal of Sewage*—My remarks above apply too in connection with sewage disposal—In the towns of Buff Bay, and Hope Bay, the Pit Closet in close proximity to the shallow wellabounds. In a few houses and in the Government Institutions the bucket system is in vogue.

In the villages the surface of the ground in the banana walks, in their back yards, and even on the public highways, is the site of election for the deposit of their stores.

There is a dumping ground situated just outside the town of Buff Bay at Woodstock, but I am credibly informed that it has not been used for the greater part of the year, but that all waste matter has been dumped in the grounds of a member of the local Board of Health resident in the town of Buff Bay.

3. *Latrines*—See above for the forms preponderating. The vast majority are not fly proof, and are open to the depredations of bird and beast.

4. *Drainage*—Buff Bay on the whole is very well drained by concrete gutters. The drain passing through the premises of Mr. S. C. Haughton, is a constant source of Anophiline Mosquitoes, and the advisability of making a concrete drain in this region will have to be seriously considered by the Local Board of Health.

5. *Overcrowding*—Obtains and will so continue until the housing and labour problems are solved. This per-se would be of little moment, were it not for the fact, that the natives shut out the "Ghosts" or "Duppies" contained in the fresh air by closing every crevice of their homes during the hours of sleep.

6. Compounds and yards are in a fair condition in Buff Bay, Hope Bay, however, still maintain the proud distinction of being the dirtiest town in the parish in this respect.

7. *Breeding Places of Mosquitoes*.—In Buff Bay the drain referred to above.

At Hope Bay—the ponds at the eastern and western ends of the Town.

3.—*Sanitary Improvements*.—Absolutely none, by either the Local Board of Health or private individuals.

4. *Relative Seasonal Mortality*—From January to March there were 18 deaths from Ackee Poisoning.

In April there were 3 deaths from Enteric Fever

In October there were 2 deaths from Enteric Fever

In January there were 3 deaths from Pneumonia

5. *Meteorological Conditions*—There was a severe drought from April to July, but fortunately this did not appear to very materially affect the Public Health. There were heavy rains in July and November. The incidence of Malarial Fever, Enteric Fever, Pneumonia and Alastrim would appear to bear causal relationship to these.

6. *Outbreak of Disease*:

Disease.	No. Cases.	No. Deaths.	Localities.	Duration.
Alastrim	..	Not known	General	Oct. to Dec.
Ackee Poisoning	..	13	"	
Infective Stomatitis and Neuritis	..	Not known	Charlestown, Swift River (Chiefly)	January to March
Malaria	..	228	General	Oct. to Dec.
Pneumonia	..	39	"	January

7. *Protection from Small Pox*—3,048 persons were vaccinated during the year; of these 2,911 cases were successful, 673 cases were children and 2,375 were adults.

8. *Prevalence of Yaws(a)*—The incidence of Yaws has been most markedly reduced as a result of the vigorous Yaws Campaign, commenced in October, 1919 and continued to the end of December, 1920. It has been chiefly noted at Swift River and St. Margaret's Bay. 1,406 cases have been treated in the districts, 1,398 of which have been cured, one died and seven remain under treatment, 89 cases were treated and cured in Hospital.

9. *Hookworm Disease*.—Creoles 1,253 stools examined, Coolies 77 stools examined.

10. *Lepers*.—I notified one case of Tubercular Leprosy during the year, a male syrian, carrying on business as a dry goods merchant. He continued his business in the town for several months, before the police took steps to prevent his doing so. He has left the district and is now, I believe, at the Lepers Home Spanish Town.

11. *Dysentery has not been prevalent*.—8 cases, no deaths for the year, all of the amoebic type.

12. *Pellagra*.—4 cases were seen, two of which were known to be recurrent. No deaths from the condition occurred. Their residences were Cooling Spring, Red Hills, Hope Bay and Skibo—outlying districts.

13. *Ackee Poisoning*.—13 cases seen, 5 died and post mortem examinations made. Sections in most cases were submitted and in all positive findings of the tropical degenerative changes in Liver and Kidney were reported.

14. *Syphilis*.—In its several stages is exceedingly prevalent in the district, and is largely accountable for the many interrupted pregnancies which have occurred. It is met with chiefly in the congenital and tertiary forms, and is very noticeable among the young. It appears to be steadily increasing.

15. *Gonorrhoea*.—This with its many sequelae is extraordinarily wide-spread in the district, and in many instances one notes a particularly resistent and virile strain of gonococci character, certain complications such as Systitis and Rheumatism.

In concluding my report I must refer to—

a *The Training of Nurses*.—This has continued during the year, 43 lectures were given by myself, a few by the Dispenser and Matron. The present Head Nurse passed the Senior Nurses Examination in Kingston during the year in a very creditable manner, taking the 2nd place amongst 11 candidates.

b *Bacteriological Work*—has been continued, Blood Examinations and the examination of the stools for intestinal parasites. The Dispenser, Mr. Bryce, who has zealously and conscientiously undertaken this branch of the work is to be commended for the manner in which it has at all times been performed.

c *Surgical Work*.—The return of surgical operations will disclose 2 deaths only among 388 operations done during the year.

I have the honour to be,

Sir,

Your obedient servant,

E. GIDEON, D.M.O.

The Honourable,
The Superintendent Medical Officer,
Kingston,

Annotto Bay,
13th April, 1921.

The Hon. Suptg. Medical Officer,
Kingston.

Sir,

I have the honour to acknowledge the receipt of your Circular No. 1092 and beg to report as follows:

1. With the exception of the Epidemic of Alastrim there has been no unusual prevalence of any particular disease during the year ending 31st December, 1920.

2. (1) Annotto Bay is the only town in this District which has a Water Supply.

(a) The Water Supply of the town of Annotto Bay is obtained from a spring which rises out of the ground on Ft. George, the property of A. F. G. Ellis, Esq., about $3\frac{1}{2}$ miles from the town.

In the out-lying villages the water supply is obtained from the rivers and streams which pass through them.

(b) The Water Supply in all cases is unlimited.

(c) The Water obtained from the spring on Ft. George is quite pure and an excellent drinking water. The water rises from three separate points all within a chain of one another and the water has to run a distance of a chain or more before entering the reservoir.

(d) In this short distance it is quite possible for the water to become contaminated by people walking, or animals, especially pigs, roaming over it, or in times of heavy rains by washings from above. If the Catchment Area was surrounded by Hog Wire of such a height and strength as would keep out men and beasts of all kinds it would be advantageous. There should be a Filter between the Catchment and the reservoir to remove the large amount of sediment more or less constant.

The water obtainable from the rivers and streams is subject to every kind of pollution.

(e) There are no Tanks in the Annotto Bay District.

(2) (a) Waste Matter. Each house has a sanitary receptacle into which house refuse is placed. The sanitary carts make house to house visits and remove the refuse and dump it on the low-lying portions of the town, in the town of Annotto Bay the Bucket System is in use, the town being divided into three sections for the purpose. The Sanitary Man works from 10 p.m. to 4 a.m. Buckets are collected twice a week and clean ones put in their

place. The used Buckets are carried to the dumping ground, washed in a tank provided for the purpose and rinsed in a solution of Jeyes. At the Hospital and all the Public Buildings the Buckets are changed every night.

- (b) (c) The dumping ground for Annotto Bay is situated about a $\frac{1}{2}$ mile out of the town due south on a part of Gibraltar land. Here pits are dug and the buckets emptied into them and as soon as the dumped material reaches to within three feet at the top the hole is filled in. Owing to the low level of the land, the clay soil and the almost complete absence of drainage these pits become filled with water in heavy weather and then it becomes necessary to empty the buckets into the Sea.

- (3) (a) In the town of Annotto Bay the law requires every house to have its latrine. the floor of which must be constructed with concrete and a bucket used. There are no surface closets, pits or trenches.

There are Septic Tanks at the United Fruit Co's. House and Offices. At the "Castle", the residence of A. C. Westmoreland, Esq., there is an absorption tank.

- (b) The wards of the hospital and the latrines and mortuary are enclosed in mosquito netting but it has been allowed to decay and there are now so many holes that practically the entire place would require recovering. The netting is really of very little use because the patients have to be allowed out at nights to go to the latrines and they will not keep the doors of the wards closed.

- (c) In the town of Annotto Bay there are no latrines open to the depredations of birds or beasts.

- (4) The drainage of the town of Annotto Bay is very bad. Its low level and the consequent difficulty of carrying off the surface water over a very large area causes the land to be water-logged and the existing swampy condition forms an enormous area for the breeding of malarial mosquitoes. In addition to this the clay soil in a constant state of moisture makes a most unhealthy condition for people to live in.

- (5) Overcrowding is universal even in the hospital where there are 75 beds in a space not large enough for more than 60.

There are a good many houses which are in a delapidated condition and not fit for human occupation.

- (6) With few exceptions the Compounds and yards around the houses are in a dirty and untidy condition, the inhabitants being content to live in the most squalid surroundings.

At the back of the houses in Middle Bay on the southside of the Main Street there is a huge swamp. If it was practicable to fill in this area with sea sand, the health of the town would be very materially benefitted.

- (7) The measures adopted to destroy the breeding-places of mosquitoes have been the improvement of drainage wherever possible. The filling in of swampy land with town refuse has done a large amount of good in the past but the whole area to be dealt with is so great that the dumping of town refuse is a drop in the ocean compared with what is required. In places where the settled water cannot be drained off, the surface is periodically sprinkled with Kerosene Oil.

All the above sanitary conditions, etc., apply to the town of Annotto Bay, in the villages outside there are no sanitary measures of any kind. The water supply is usually obtained from the nearest river or stream which is open to all kinds of pollution. There are very few latrines, the majority of the people living in the Districts go to the bush and where a latrine does exist it is in nearly every instance an open surface one. The better class houses have latrines which consist of a surface pit and are open to the predation of birds and beasts.

Overcrowding in the country districts is even worse than in the town. It is simply appalling to see the hovels in which the peasantry class live and when one sees them filled with furniture, household chattels, and produce and remembers that at night the inmates sleep with every crevice and opening plugged to keep out fresh air it is miraculous how so many of them survive to see the morning and why more of them do not die from Pulmonary Tuberculosis.

3. There have been no Sanitary Improvements carried out by the Local Board of Health.

4. There was no increase in the relative mortality during the Calendar Year under review.

- 5. The rainy season at the end of the year 1920 was very slight and did not set in before January 1921. In consequence of the dry weather there was not the usual rise in the incidence of malarial fever usually met with during the months of October, November and December.

6. The Epidemic of Alastrim in the Annotto Bay District on the 22.8.20 was brought from Kingston by Albert James who came to Annotto Bay to stay with his relatives for a few days; from this case it gradually spread on the leeward side of the house in which he was isolated and up to the end of December there have been 25 cases in the town.

On the 15.9.20 Emma Anderson came from Kingston to Lower Chesterfield in the 14th day of the disease and started a centre of infection. Almost the 3rd week in October Vida Moore, who had been staying in Kingston returned to her home at Cross Hill, developed the disease and started a wide-spread infection which, with that started by Emma Anderson, accounted for 120 cases or more in the Castleton District.

On the 17.9.20 Margaret Stewart residing at Rosemount went to Kingston contracted the disease, returned and communicated it to six others.

In the month of November Mary McDonald contracted the disease in Kingston and returning to Enfield communicated it to five members of her family and started a centre of infection.

In many cases in which the disease broke out in a near district it has proved beyond a doubt that the disease was brought from Kingston or August Town. Although there have been several severe cases there has been only one death in a man aged 60 named Alexander Williams, who was vigorously treated by his friends with hot bush and jeyes baths, in consequence of which the skin stripped from off his hands, feet, arms and legs, and being in a feeble state of health he died from exhaustion.

From the commencement of the disease in the Annotto Bay District in August of last year until the 31st December 1920 there have been altogether 107 cases of Alastrim seen and notified in the Annotto Bay District. Of these 20 were under the age of 10, 28 between the ages of 10 & 20; 15 between the ages

of 20 & 30, 20 between 30 & 40, 13 between 40 & 50 years. In the remaining 11 the ages being doubtful or not obtainable they have not been included in the above numbers.

7. I do not think the population of the district is sufficiently well protected against Small Pox to ensure against an outbreak of the Epidemic should it arise. Vaccination has been carried out during the latter part of 1920 as thoroughly as possible. This is partly due to the wet weather partly to the scarcity of food and clothing, but chiefly to the fact that they have discovered that Vaccination of adults is not compulsory.

8. There appears to be very little Yaws in the District now. It has been so thoroughly treated during the past two years that one does not hear much of it now.

(b) The chief localities in which it has been noted here: Fort George, Baxter's Mtn., Pleasant Hill, Annotto River, Epsom, Enfield, Juno Pen & Mt. Joseph.

(c) The No. of cases treated for the year under review was 1332.

(d) Of these 949 are known to have had the symptoms cured.

9. The No. of persons known to be suffering with symptoms of Hookworm disease is Creoles 53, Coolies 37.

The number of persons who are known to be infected with Hookworm is Creoles 53, Coolies 37.

The number of deaths that have occurred in the District from Hookworm disease is Creoles 1, Coolies 4.

10. There is no case of Leprosy known to me in this district.

There is an indentured immigrant at Chobey Estate in the Richmond District who is suffering from the anoesthetic variety of Leprosy. He is non-infective and is in good health otherwise, and is therefore working. He comes up for observation occasionally.

11. There is no Poor House in the Annotto Bay district.

12. Dysentery has not been prevalent. The number of cases known is (a) Amoebe nil, (b) Bacillary 1.

13. No cases of Pellagra have been met with.

14. I have seen only 7 cases of the so-called Vomiting Sickness or Ackee Poisoning during the year, all of whom died and Post Mortems were made. I have heard of 5 other cases, all of whom died.

15. Syphilis is very prevalent and is accountable for a large number of miscarriages. The stage in which the disease is most often seen is the Tertiary. One does not often see cases in the secondary stage and still more rarely in the primary.

The disease is quite common among young people. The disease is undoubtedly on the increase.

16. Gonorrhoea is even more prevalent than Syphilis. Complications are common and a cause of the very large proportion of the disability of the working classes due to disease accounting for large number of miscarriages and invalidism from Endometritis, Salpingitis and peri and parametritis. This disease is also on the increase.

I have the honour to be,

Sir,

Your obedient servant,

H. JOSEPH, D.M.O.

Port Maria,
June 30th, 1921.

Sir,

I have the honour to acknowledge receipt of Circ. 1029, and subsequent letter requesting that the Annual Report be made to include the period 1.1.20 to 31.12.20, instead of the financial year as is customary. I beg to submit the following Report on the Health Conditions of the Port Maria District for the period requested.

1. *Prevalence of Sickness in Different Seasons.*—It has always been gratifying to me to record the gradual lessening in incidence of Malaria! Fevers in this District for the past eight years, but it is with equal regret that I have to report the unusual prevalence of this disease during the period under review. In all 261 cases were admitted to hospital, and very many more were treated in private practice. The disease was also unusually severe, and many malignant cases were seen which accounted for a few deaths. During the severe drought many of the smaller rivers and springs ran dry, and when it did break in November, instead of the usual heavy downpour which would have caused a general flushing out, only intermittent showers fell, which filled up trenches, pools, etc., and the Anophelines did the rest.

Only 11 cases of Typhoid Fever were notified with 4 deaths.

The Alastrim Epidemic is treated fully under Par. 6.

2. *Sanitary Conditions.*—(1) The Water Supply of Port Maria and its environs is the same as previously reported.

(a) Source.—Sandhill, Crescent, eight miles away.

(b) Quantity—Supply constant, except in times of severe drought, yielding over 200,000 gallons daily.

(c) Purity is unquestioned.

(d) Protection from pollution absolute. Hardness of the water is, however, still giving trouble.

(e) Public Tanks.—There are no Public Tanks, but protected wells at Salt Gut and Galina, and protected springs at Oracabessa and other places.

(2) *Disposal of Waste Matter.*—No change.

(a) At Port Maria there is a daily collection of house refuse and street sweepings by the Sanitary Carts. This service is very efficient.

- (b) There is a deposit ground at Trinity Estate outside the limits of the town.
- (c) At Hampstead and Oracabessa there are no deposit grounds, but scavenging arrangements are tolerably good.
- (3) *Latrines*.—(a) At Port Maria the Bucket System established in 1914 is still in use, and is giving good results.
- (b) Surface Latrines—Nil.
- (c) Pit Latrines—4.
- (d) Bucket Latrines—167.
- (e) Other Varieties.—Sewerage System at Gray's Charity, emptying into the sea, and 2 Septic Tanks on the U.F. Co's. premises.
- (f) Few are fly proof.
- (g) None are accessible to bird or beast.

At Oracabessa and other settlements the Surface Latrines is the rule with here and there a Pit or Bucket Closet.

(4) *Drainage* throughout the district is good, but in Port Maria owing to the low-lying nature of the greater part of the town, drainage is bad, and water tables and culverts have constantly to be flushed.

(5) *Overcrowding* exists and is becoming more marked in the yard-rooms, in the town, and in the barracks on some of the estates.

(6) Breeding places of mosquitoes will always exist on the low-lying lands, and after the rains in November much filling and oiling had to be done.

Sanitary Improvements.—There has been no Sanitary Improvements effected during the period under review.

4. *The Relative Mortality* in the different seasons is impossible to arrive at, but the general mortality rate was not high.

5. *Meteorological Conditions*.—The year was marked by a long and unprecedented drought, the rainfall for the whole year hardly equalling that of one month in ordinary times. The effect of this on the influence of Malarial Fevers has already been mentioned.

6. *Infective Disease*.—The outstanding feature of the year has been Alastrim. The disease first made its appearance in the village of Hampstead in the latter part of August, two cases who had contracted it in Kingston having been reported there. By the 5th of September 5 new cases were discovered in Port Maria, Bailey's Vale, and Oracabessa—all being traced to Kingston. On the 7th Sept., the Isolation Hospital at Sea Villa near Oracabessa was opened, and as new cases occurred they were quickly removed and close watch kept on contacts. In the meantime vaccination of infants and school children was thoroughly carried out, and a large number of adults who presented themselves were vaccinated. Up to December 31st 55 cases were admitted. There have been no deaths. Owing to the prompt removal and isolation of the cases as they occurred, the disease did not assume epidemic form, except in and around the village of Hampstead, where it had got out of hand before it was discovered, 25 of the 55 cases coming from that section.

As to the nature of the disease, there has been some difference of opinion. It is generally admitted, however, that it is of the same type as that which occurred in Trinidad 1901-3 and again in New South Wales 1913-14 Dr. J. C. McVail, an eminent authority on Smallpox, in his Milroy Lectures delivered in London March 1919, describes two types of the disease—The Severe or African Type, and the Mild or American Type—and he places the Trinidad and the N.S. Wales epidemics under the latter type, also the outbreak in Nottingham in 1900, which was traced to Salt Lake City, U.S.A. In discussing the relation of the two types he makes this very interesting statement:

"The question naturally occurs whether these two different types of Smallpox—the African and the American—are really the same disease or whether they have some relation to each other more or less analogous to that which exists between Typhoid and Paratyphoid. It is safe to say that Vaccination supplies the answer. So far as I have seen the great bulk of the evidence is to the effect that Vaccination prevents the mild type just as it prevents the severe type. The relationship of vaccinia to the two types appears to be identical, and Jenner's conviction which was originally much disputed, that variola and vaccinia are essentially the same disease, is now almost universally accepted. The conclusion, therefore, is that both infections are variolous."

He also quotes Chapin who had come to the same conclusion when this mild type was spreading through America, as saying:

"The crucial test of the identity of the two forms is, however, to be found in their immunity relations."

Now, whatever the differences of opinion may be, I think that I am safe in saying that the concensus of opinion of the medical men in Jamaica is that Vaccination is as effective against Alastrim as it is against Smallpox. Those of us, therefore, who as students saw these two types running concurrently, and who recognised in Alastrim the same mild form seen in Great Britain in 1900-3, are still in good company, and can afford to remain unrepentant.

After some months experience of the disease, however, studying its similarity to, and its differences from, the severe form, and noting also its low infectivity and almost negligible death-rate, I frankly admit that, clinically at any rate, it certainly merits a special name, and we should no more speak of Alastrim as true Smallpox than we should call an ordinary streptococcal cellulitis erysipelas. It may well be that when the causal agent of the variolous diseases is discovered the relation between them will be found to be the same as that between these two diseases mentioned.

In view of the opinions of these noted authorities, and of our ignorance of the matencies morbi of both forms, (and having regard also to the high virulence which Alastrim assumed in Hayti), death-rate of some 13% it is certainly going too far to state definitely that it is a distinct entity, and that it must necessarily breed true in any circumstances.

7. *Smallpox Protection*.—Children are well protected against Smallpox, as is abundantly proved by the very low incidence among them of Alastrim. Adults are also better protected now than formerly as many have been revaccinated, and the Alastrim Epidemic has been itself an effective, though very expensive form, of revaccination.

8. *Yaws* is by no means so prevalent now, and only in a few settlements is the disease present. The treatment by injections of Diarsenol and other arsenical preparations has had most gratifying results. During the year 1920, 1,412 cases were treated with 1,211 cures.

9. *Ankylostomiasis* is prevalent, but it is impossible to state the number of cases. In hospital 130 were treated, 66 creole and 64 coolies. There were two deaths from this disease registered.

10. *Leprosy*.—Only one case of Leprosy was seen, and that was in the case of a male coolie who had escaped from the Leper's Home. He was sent back.

11. Poorhouse cases:

(a) No. known to be infected with Hookworm	7
(b) No. affected with Pul. Tuberculosis	38
(c) None contracted either disease in the Poorhouse.	

12. *Dysentery*.—Not been prevalent, only 9 cases coming under my notice, all of the Bacillary variety.

13. *Pellagra*.—No cases of Pellagra came under my notice.

14. *Ackee Poisoning*.—(a) No. seen Post Mortem—10.

(b) None heard of otherwise.

15. *Syphilis* is still very prevalent, though the number treated in hospital is much less than the corresponding period the year before; 32 cases were admitted to hospital, and these were nearly all primary and secondary cases.

16. *Gonorrhoea* is also on the increase, though of course more persons take advantage of the free treatment. 93 cases were treated in hospital in-door, chiefly complications, and quite as many were seen out door.

I have the honour to be,

Sir,

Your obedient servant,

G. I. LEVESNE, D.M.O.

Hon. E. Langley Hunt, C.M.G., S.M.O.,
Kingston.

Montego Bay,
June 23rd, 1921

Sir,

Re Circular 1092/1/3/21—Annual Report Amended by Cir. 28/3150/6/6/21

I have the honour to forward the following Report of the Montego Bay Medical District for the twelve months ended December 31st 1920.

During these months we have had quite a series of minor epidemics some attended with quite a relatively large mortality.

In my previous report I mentioned that Pneumonia had been prevalent during the latter part of 1919. The disease has of late been extraordinarily common and has not been confined to any one quarter. For the most part these have been Lebar in type and there has been a large mortality. Of the 18 cases treated in hospital there were 5 deaths, but the death rate in those treated at their homes was even greater, due to the lack of proper nursing, and to the cases coming under treatment at a late date.

Attempts were made to find out the exact cause of this disease but nothing of importance was observed the "Pneumococcus" being the prevailing cause in all sputa sent to the Bacteriologist.

Pulmonary Tuberculosis.—This disease has if anything been more marked than in the previous year and there has been 29 cases notified.

I must again reiterate my suggestion of a year ago that the sooner a Tubercular Hospital is built the better for the community at large, as nine-tenths of the cases have to be treated in their own homes where absolutely no precautions are taken.

Dysentery.—In April 1919, we had quite a sharp attack of Bacillary Dysentery. This came on after the break of the prolonged drought. Attempts were made to have the Water Supply of Montego Bay itself, chlorinated thro' the Brandon Hill Reservoir, which could have been done at very little cost and would have reduced the number of cases, but the Local Board of Health considering that the disease was due to the ingestion of Mangoes, did not think it advisable to adopt the suggestion, hence the epidemic was prolonged.

Amoebic Dysentery.—Three cases came under my observation, but they all arrived from Cayman Brac already infected.

Alastrim made its advent on August 18th and continued to the end of the year with slight fluctuations, 98 cases having been reported. The outbreak of this disease brought to public notice the urgent need of an Isolation Hospital for the Town. After much delay one was eventually erected in the most unsuitable site that could have been chosen and there it still remains a danger to the public and against the definite instructions of the Central Board of Health.

Malaria was more than ever prevalent in the last two months of the year when there was a plague of Mosquitoes, which was so bad that a large part of the town had to resort to smoke fires at night. Here again I must reiterate the suggestion of removing the scrub from the honey-comb rocks around the town as one of the most practical steps in eradicating the disease.

Typhoid Fever is endemic in the district and 24 cases have been reported. As many of the cases go untreated for a week or more and no precautions taken it is not unlikely that it will increase now that we have a plague of flies. One has been able to perform quite a number of prophylactic inoculations

but a wise move would be to have such inoculations compulsory and in a small Island like Jamaica there is no reason why, after a few years, the disease should not be unknown, whereas it is at present one of the most fatal we have to contend with.

Regarding the Sanitary Conditions of the District, little can be added to the report of last year. The condition of Montego Bay itself gradually grows worse with unswept drains and sidewalks and general filth of the streets, with dead cats and dogs left to the tender care of the "John Crows," at times the sole scavengers of the streets. Of new sanitary arrangements there have been none.

The only exception to the rule is that of Catherine Hall Estate, where Mr. F. M. Kerr-Jarrett has built modern barracks for his employees and has instituted a Sanitary Corps with incinerators to burn all the refuse and excreta.

The Water Supply in the town has been better during the last year, due to the benevolence of the Almighty in sending rain, as the supply as reported in my last return is so inadequate that after about three weeks drought, it is already short.

Nothing noteworthy has been observed of the mortality during the different seasons of the year, nor of the effect of meteorological conditions on disease.

Vaccinations performed during the year have been upward of 3,000, and this God-send, if not wholly, has to a great part fallen to the credit of the Director of Education in his order that all school children should be vaccinated before attending school; this brought about through the advent of Alastrim. Fully 60% of the cases were never vaccinated before and I should again draw your attention to the suggestion in my letter of the 22nd July, 1920 of having "Notice Books" with Certificates and counterfoils for distribution to each District Constable as, unless some such method is adopted, the younger generation will again evade the law.

Yaws.—127 cases have been injected during the last year, and from the reports of the District Constables there are very few cases at present. As I pointed out in my last Report, this is to a large extent due to the fact that the Medical Officer of Health has for years been treating the disease with injections of Arsenical Preparations.

Hookworm.—This, though prevalent, is not remarkably so in the Montego Bay Medical District, 90% of the cases coming under my care residing in the neighbouring medical district, especially from two localities, Marldon and John's Hall, which are apparently infested with the disease.

Leprosy.—No cases have come under my notice in this district.

Poor House.—There have been 20 cases of Hookworm with 7 deaths and 16 cases of Pulmonary Tuberculosis with 8 deaths treated in this Institution.

Pellagra.—No cases have been noted.

Syphilis.—Still continues prevalent and during the year 70 cases have been treated in Hospital and 153 out of Hospital with the various Arsenical Salts, but a very small percentage are ever seen in the Primary Stage.

Gonorrhoea.—Is not more prevalent than heretofore.

I have the honour to be,

Sir,

Your obedient Servant,

D. LAWRENCE TATE,
F.R.C.S., Edin., D.M.O.

The Hon.

The Suptg. Medical Officer,
Island Medical Office,
Kingston.

Race Course P.O.

April 30th, 1921.

Sir,

I have the honour to acknowledge receipt of your Circular No 1092 and to report on the Vere Medical District for the year which ended December 31st 1920.

Seasonal Prevalence of Disease.—The year under review was one of continual drought, in which the rainfall for the district averaged 16 inches, consequently the usual seasonal outbreaks of malaria did not occur. The so-called Vomiting Sickness which appears in the colder months of the year was almost entirely absent as only three cases came under my notice.

Waste Supplies of a rural district like Vere must always be a problem. The population is spread over a wide area and in the district remote from the sea, water is obtained only at considerable depths, and the cost of sinking a Well is beyond the resources of the average householder. The available sources are, a few Public Wells in the larger villages, numerous private Wells near the Sea where the cost of sinking them is small, estate wells, irrigation water, and the two rivers which at infrequent intervals, flow through the district. With the exception of the wells on the estates, none of these sources are protected against pollution, and in the areas near the sea the surface wells must be highly contaminated. In certain villages, notably Hayes, an almost perpetual water famine exists. The village of Hayes covers a large area and the population is round about a 1,000, and it is served by a single Public Well over 100 feet deep, from which water is drawn by hand.

In the Race Course Area the Wells are more numerous, but here again, no provision is made against pollution. At Banks and Sedge Pond there are no wells and the people have to travel considerable distances to neighbouring estates to obtain water. There are no Public Tanks in the District.

Disposal of Waste Matter.—No Public provision is made as there is no compact township of any size in the district.

Latrines.—Every house in the district has been provided with a latrine, and all surface latrines have been abolished. With the exception of the villages of Portland, Rocky Point, and Mitchell Town, where the Bucket System was introduced all the latrines are of the pit type. In those villages with buckets an attempt is being made to convert them into pits, wherever it is found practicable to do so, for it was found that in the absence of arrangements for the regular collection and disposal of the night soil, the latrines were either not used, or in the rare instances where they were used, the night soil was usually thrown into an adjoining lot. The pit latrines have been in use for over a year, and are regularly inspected by the Vere Estates Sanitary Officers. On the Estates the East Indian population is provided with suitable sanitary arrangements, but there is increasing evidence of their use in every case when they are kept clean. In a few of the houses of the well-to-do modern sanitary conveniences have been introduced, and these are giving satisfactory results. At the Hospital the Bucket System is still in use, but the recommendations have already been made for the installation of a septic tank system.

In a great many instances the latrines in the district, were constructed hurriedly in order to meet the requirements of the Rockefeller Representative, for the purpose of the Hookworm Campaign with the result that in many cases the conveniences are defective in construction and require the constant supervision of the Sanitary Officers, and many are not fly-proof.

Drainage of Chief Towns.—No arrangements are made.

Overcrowding is prevalent, for the majority of the houses are so small that overcrowding is inevitable. The immediate effects of this overcrowding must be a progressive increase in the Tuberculosis rate, and a very strong contributory cause to the alarming incidence of Venereal Disease in the Island. The housing of the district generally is very bad and in the Banks and Rocky Point Villages, it is deplorable. It is within my experience that the substantial dwellings belong either to labourers who have returned from Cuba, or the Central American Republics, or to artizans employed on the estates. This would indicate to appear that it is not lack of ambition which prevents the average native labourer from building a house, but lack of money.

Sanitary Improvements.—Beyond completing the installation of latrines, no sanitary improvements have been made in the District by the Local Board of Health.

Outbreaks of Disease.—During the year two diseases became epidemic, Alastrim and Measles. Alastrim made its appearance in August at Milk River, and since then every village in the district has been infected. Fortunately, however, the measures, which were adopted, for the control of the epidemic appear to have been successful as only 30 cases were reported up to December 31st. The whole estates population were vaccinated with the result that not a single case of Alastrim developed in a vaccinated person, and the East Indians enjoyed complete immunity. All the cases with the exception of 4 in which satisfactory local arrangements could be made, were sent to the Isolation Hospital at May Pen. Measles became epidemic towards the end of the year, and the Village of Hayes suffered severely.

Typhoid Fever. 29 cases were seen, in which the diagnosis was bacteriologically confirmed, eight of which were fatal.

Tuberculosis.—26 cases of Pulmonary Tuberculosis were admitted into Lionel Town Hospital. The patients were housed in the Isolation Ward, as long as they cared to remain in the hospital. Eight patients died, while the remainder after spending varying periods in hospital went home to act as local centres of infection.

Malaria.—The deficiency in the rainfall has been accountable for a notable reduction in the admissions to hospital from this cause; 322 cases were admitted with 5 deaths.

Dysentery.—49 cases were seen which presented dysenteric symptoms, the majority of which were amoebic in type.

Vaccination.—The children of the districts are well protected against Smallpox, and during the year about 2,000 adults were vaccinated.

Yaws.—Is not prevalent. No cases were seen.

Hookworm.—International Health Board finished its work in the district in October, when, with few exceptions all those infected with Hookworm had been treated until cured and mass infection of the population had disappeared. The owners of the Estates in Vere District subsidised a Hookworm Campaign which followed up the operations of the International Health Board, and is still at work in the district. It is not possible to give figures showing the numbers known to be suffering from Hookworm disease, but it is of interest to note that 9% of the population were re-infected 6 months after the initial campaign had been completed.

Lepers.—There are no known Lepers in Vere and only 2 cases of Pellagra were met with during the year.

Ackee Poisoning.—Three cases were seen.

Syphilis.—Is prevalent and to so great an extent that it is the most serious menace to the Public Health, which exists to-day. It is seen almost daily, and in all its forms. Among the young adult population its prevalence is lamentable and there can be no doubt whatever that the disease is increasing, for it is inevitable that it should spread until effective measures are taken to bring it within some degree of control.

Gonorrhœa is also very common, and no notice is taken of the disease unless it is attended by painful complications. As an invalidating cause among the women of the Island its importance cannot be overestimated.

I have the honour to be,

Sir,

Your obedient Servant,

M. T. CASSIDY.

REGISTRATION OF DEATHS.

The unsatisfactory conditions under which large numbers of deaths are not medically certified still exist.

The number of non-medically certified deaths in the period under review is 15,451, out of a total number of 21,707.

INFANTILE MORTALITY.

Infantile Mortality returns disclose an appallingly high proportion, and social conditions continue to be a contributing factor.

When it is possible by a more extensive and general application of the objects set out by the Child Saving League, which is doing excellent work in Kingston; also facilities afforded to expectant mothers of obtaining advice and instruction, as is being done in England and America, and I understand, in some of our Sister Colonies by welfare organizations; there is no doubt that the deplorable facts recorded from year to year as to Infantile mortality must show considerable improvement.

MEDICAL ATTENDANCE.

It has been stated that the facilities for affording medical aid are not as extensive as could be wished for and as I stated in my last report there is no doubt that the existing system requires reorganization.

During the year under review a Commission composed of Hon. Dr. E. L. Hunt, S.M.O., Chairman; Sir John Pringle, Hon. D. Campbell, Hon. & Rev. A. A. Barclay, Hon. D. T. Wint, Hon. A. G. Nash, Hon. G. S. Ewen, Hon. J. A. G. Smith, was appointed by His Excellency the Governor to enquire into the working, cost, and equipment of the Island Medical Service. At the conclusion of the year, the Commission had not completed its labours, but they were engaged in considering the best means for a wider scope of its operations—bringing medical aid to all classes of the community, for the establishment of measures for dealing with preventive and curative disease, for an extension of the machinery for dealing with Health and Sanitary conditions, and for an improvement of the personnel of the Department.

It is to be hoped that a substantial improvement will result from the finding of the commission, composed as it was, of those who are so ably fitted to determine what is best for the public interests.

X-RAY APPARATUS.

This machine is now fully installed and in complete working order at the Kingston Public Hospital.

An Officer who is taking a special course of Radiology in England is to be attached to the Hospital, and with Mr. R. A. N. Gordon, the Chief Dispenser at the Hospital, who assembled the apparatus, and is now in charge, doing good work, the public will have the benefit of a machine that provides for reliable diagnosis and treatment of disease with X-Rays.

PUBLIC GENERAL HOSPITALS.

The Medical History of these Institutions, is set forth in the reports of the D.M.O.'s. and shewn in the Nosological Tables during the year in the relief of sickness and suffering amongst the humbler classes and other sections of the Community.

The number of cases treated in the several P.G. Hospitals was 15,433 with 621 deaths, a rate of 4%.

The number of operations performed was 3,395, with 30 deaths, a rate of 8.8%.

In addition to the above there was a large amount of work done by the outpatient Department attached to the Public General Hospitals as shewn by the return in another portion of this report.

There can be no question as to the value and merit of the benefit conferred upon the sick poor, who are unable to pay for medical treatment by the existence of this out-patient Department.

NEW WORKS.

Buff Bay.—Removal of the staircase to No. 6 Ward on the outside and placing of same in the Female Ward below.

Annotto Bay.—Erection of a porcelain enamelled Sink in the Operating Room.

Erection of a latrine of 4 compartments.

Cave Valley—Covering of the tank.

Mandeville.—Erection of Dispenser's and Matron's quarters. Conversion of former Dispenser's quarters into an Operating Room.

Enclosing of the southern end of the Under-building to form a Ward with Office for out-patients adjoining.

Erection of a shed and covered way in front of the hospital.

Conversion of the former matron's quarters into private rooms.

Erection of 2 latrines for the private wards and partial completion of 4 latrines and 2 bath rooms for Under-building Ward and Upper Male Ward, and also bath rooms and latrines for employees and In-patients.

Erection of 2 Septic Tanks.

Erection of Latrine System (not quite finished).

Lionel Town.—Erection of a Wash house.

Statement of amounts received for Hospital Fees from paying patients (other than Constables) at the Public General Hospitals outside Kingston during the year 1920.

Hospitals.	Amounts.
	£ s. d.
Morant Bay ..	12 16 0
Hordley ..	32 4 6
Port Antonio ..	25 9 3
Buff Bay ..	55 3 8
Annotto Bay ..	2 9 0
Port Maria ..	22 8 6
St. Ann's Bay ..	25 8 10
Cave Valley ..	9 16 0
Falmouth ..	8 12 0
Ulster Spring ..	5 8 0
Montego Bay ..	19 8 6
Lucea ..	6 4 6
Sav.-la-Mar ..	49 17 0
Black River ..	34 4 9
Mandeville ..	28 5 6
Chapelton ..	13 7 6
Lionel Town ..	9 0 0
Spanish Town ..	13 11 6
Linstead ..	12 2 0
	375 17 0

VACCINATION.

Year.	Success- ful.	Not Suc- cessful.	Did not return.	D.M.O.	Constables.			Registrars.			Totals.		
					£	s.	d.	£	s.	d.	£	s.	d.
1914-15 ..	21,575	1,249	549	1,183 11 0	322	15	2	212	9	6	1,718	15	4
1915-16 ..	26,391	701	661	1,001 5 0	266	0	9	280	8	5	1,547	14	2
1916-17 ..	25,482	1,306	787	1,142 19 0	303	5	2	257	9	7	1,703	13	9
1917-18 ..	20,971	667	622	1,026 15 0	276	13	11	230	7	6	1,533	16	5
1918-19 ..	19,019	525	417	881 11 0	226	18	5	247	12	5	1,356	0	10
1919-20 ..	21,091	1,337	402	613 5 6	165	2	0	131	18	2½	910	5	8½
1920 ..	66,449	3,018	1,712	1,054 7 0	227	18	10	341	2	5	1,623	7	7

Return shewing the expenditure of the Department.

	Personal Emoluments.	other Charges.	Gross Expenditure.	Amount of Dues Collected.	Actual Expen- diture after deducting amounts passed to credit of Hospital.	Amounts grants Estimated.
Head Office ..	£ 3,689 18 2	£ 13,972 2 3	£ 17,662 0 5	£ 3,561 4 11 $\frac{1}{4}$	£ 14,100 15 5 $\frac{1}{2}$	£ 20,847 3 3 $\frac{1}{4}$
District Medical Officers ..	8,331 0 6	..	8,331 0 6	..	8,331 0 6	8,212 10 0
Supernumerary Medical Of- ficers ..	616 2 0	..	616 2 0	..	616 2 0	550 0 0
Temporary Outstations and Dispensary appts. ..	122 10 0	..	122 10 0	..	122 10 0	157 10 0
Public General Hospitals,—						
Morant Bay ..	342 8 11	724 6 2	1,066 15 1	15 11 4	1,051 3 9	837 3 6
Hordley ..	407 5 10	1,010 6 3	1,417 12 1	35 15 2 $\frac{1}{2}$	1,381 16 10 $\frac{1}{2}$	1,369 8 11 $\frac{1}{2}$
Port Antonio ..	638 18 4	2,315 9 8 $\frac{1}{2}$	2,954 8 0 $\frac{1}{2}$	35 5 11	2,919 2 1 $\frac{1}{2}$	2,463 1 3
Buff Bay ..	705 9 0	2,025 9 7	2,730 18 7	78 13 0	2,672 5 7	2,154 1 3
Annotto Bay ..	535 9 8	1,992 13 0 $\frac{1}{2}$	2,528 2 8 $\frac{1}{2}$	4 19 8	2,523 3 0 $\frac{1}{2}$	1,991 4 3
Port Maria ..	637 2 7 $\frac{1}{2}$	1,619 7 0	2,256 9 7 $\frac{1}{2}$	30 19 9	2,225 9 10 $\frac{1}{2}$	1,753 13 6
St. Ann's Bay ..	389 10 11	609 16 10	999 7 9	32 3 6 $\frac{1}{2}$	967 4 2 $\frac{1}{2}$	881 18 3 $\frac{1}{2}$
Cave Valley ..	140 19 9	305 7 10	446 7 7	24 7 8	421 19 11	406 9 0
Falmouth ..	384 7 0	620 13 8	1,005 0 8	22 5 3 $\frac{1}{2}$	982 15 4 $\frac{1}{2}$	837 0 4 $\frac{1}{2}$
Ulster Spring ..	120 8 3	101 5 1 $\frac{3}{4}$	221 13 4 $\frac{3}{4}$	7 12 0	214 1 4 $\frac{3}{4}$	269 4 0
Montego Bay ..	417 2 8	961 7 1	1,378 9 9	34 14 6	1,343 15 3	1,158 2 3 $\frac{1}{2}$
Lucea ..	390 2 0	655 17 3	1,045 19 3	8 16 3	1,037 3 0	738 8 9
Sav-la-Mar ..	694 16 10	1,751 9 2	2,446 6 0	57 14 4	2,388 11 8	2,185 1 0 $\frac{1}{2}$
Black River ..	373 12 6	1,000 3 10	1,373 16 4	39 7 0	1,334 9 4	1,138 6 7
Mandeville ..	350 14 5	1,006 19 5	1,357 13 10	30 18 2	1,326 15 8	1,102 12 6
Chapelton ..	419 16 8	1,094 10 6	1,514 7 2	5 2 6	1,509 4 8	1,252 11 0
Lionel Town ..	610 15 0	2,002 5 6 $\frac{3}{4}$	2,613 0 6 $\frac{3}{4}$	16 1 2	2,596 19 4 $\frac{3}{4}$	2,286 9 4
Spanish Town ..	602 14 3 $\frac{1}{2}$	1,675 14 7	2,278 8 10 $\frac{1}{2}$	35 5 2	2,243 3 8 $\frac{1}{2}$	1,898 0 3
Linstead ..	429 2 6	1,025 10 0 $\frac{1}{2}$	1,454 12 6 $\frac{1}{2}$	12 4 0	1,442 8 6 $\frac{1}{2}$	1,114 10 0
Yaws Fees ..	10,382 3 10	..	10,382 3 10	..	10,382 3 10	2,000 0 0
Hookworm Investigation ..	..	2,249 12 10	2,249 12 10	..	2,249 12 10	2,000 0 0
Travelling Expenses of Bac- teriologist ..	..	28 2 9	28 2 9	..	28 2 9	50 0 0
Drugs & Poisons Law ..	9 12 0	..	9 12 0	..	9 12 0	17 0 0
Medical Attendance Immi- grants ..	..	..	..	..	..	..
Public Hospital ..	122 18 4	..	122 18 4	..	122 18 4	164 14 0
Lunatic Asylum ..	7,842 3 1	16 008 11 10 $\frac{1}{2}$	23,850 14 11 $\frac{1}{2}$	843 2 5	23,007 12 6 $\frac{1}{2}$	19,429 15 4 $\frac{1}{2}$
Lepers Home ..	1,446 3 3	2,940 4 9	4,386 8 0	0 5 6	4,386 2 6	3,445 4 2 $\frac{1}{2}$
Victoria Jubilee Hospital ..	848 3 10	1,503 11 11	2,351 15 9	702 2 11	1,649 12 11	1,897 1 10 $\frac{1}{2}$
Vaccination Fees ..	1,623 7 3	..	1,623 7 3	..	1,623 7 3	1,500 0 0
Medical Officer, General Peni- tentiary ..	260 11 11	..	260 11 11	..	260 11 11	250 0 0
Head Office, Port Royal ..	533 5 6	..	533 5 6	..	533 5 6	487 10 0
Quarantine ..	517 0 0	1,494 16 10 $\frac{1}{2}$	2,011 17 9 $\frac{1}{2}$	807 0 1	1,204 17 8 $\frac{1}{2}$	1,838 13 1
Central Board of Health ..	..	10 14 1 $\frac{1}{2}$	10 14 1 $\frac{1}{2}$	..	10 14 1 $\frac{1}{2}$	25 0 0
Medical Council ..	7 7 0	..	7 7 0	..	7 7 0	20 0 0
Venereal Diseases ..	1,652 6 0 $\frac{1}{2}$	..	1,652 6 0	..	1,652 6 0	2,141 0 6
	46,595 10 9	60,706 10 0 $\frac{1}{2}$	107,302 0 9 $\frac{1}{2}$	6,421 12 4	100,880 8 5 $\frac{1}{2}$	88,890 8 5 $\frac{1}{2}$

Return showing the number of cases and names of persons prosecuted at the instance of the Constabulary for violation of Law 34 of 1894—The Drugs and Poisons Law during the calendar year, 1920.

Parish.	Title of Case.	Name of Accused.	Nature of Offence.	Date. of Trial.	Result.	Rmarks.
St. Mary	Rex vs Melhado Passard	Melhado Passard	Selling Indian Root Pills by retail	21.5.20	Fined 1, & 4 Paid cost of 48 hours H.L. Annotto Bay Lock-up	
St. Mary	Rex vs Vincent Lee	Vincent Lee	" "	21.5.20	Fined 4, & 1 cost or four hours H.L. Annotto Bay lock up.	Paid
St. Thomas	Rex vs J. T. Edman	J. T. Edman	Not keeping a Poison sale book	15.12.20	Fined 5, or three days	Paid

(Signed) W. CLARK.

Inspector General of Police.

Value of Drugs, etc., issued to the various Institutions from the Island Medical Stores during the year 1920 from 1st January to 31st December.

		£	s.	d.
Value of Drugs and Sundries to the Public General Hospitals, Lepers Home and Medical Districts		9,481	19	6
do Stimulants issued to the Public General Hospitals and Lepers Home		130	2	1
do Drugs etc., issued to Kingston Public Hospital		2,933	10	1
do Stimulants issued to Kingston Public Hospital		161	6	7
do Drugs etc., issued to Jubilee Hospital		112	6	11
do Stimulants issued to Jubilee Hospital		3	3	10
do Drugs etc. issued to Lunatic Asylum		540	2	0
do Drugs etc. issued to Prisons and Reformatories		369	13	10
do Stimulants issued to Prisons and Reformatories		0	13	9
do Drugs issued to Department of Agriculture		9	3	8
do Drugs etc issued to quarantine Station and Visiting Officers		7	1	9
do Stimulants issued to Quarantine Station and Visiting Officers		0	16	10
do Drugs etc. issued to Parochial Boards		1,288	10	3
do Stimulants issued to Union Poor House		26	11	10
do Drugs etc. issued to Constabulary Department		84	14	6
do Quinine in Packets supplied to Post Office		452	10	0
do Drugs and Sundries sold		164	12	11
do Dymph issued to District Medical Officers		1,611	9	5
do Quinine issued to estates		44	0	0
do Drugs etc., issued to Shortwood College		5	16	1
do Stimulants issued to Shortwood College		0	17	5
do Drugs etc. issued to Jamaica Government Railway		17	10	0
do Drugs issued to Hookworm Campaign		94	11	9
do Quinine Tablets issued for Schools		60	0	0
do Drugs issued to United Fruit Company		46	18	5
do Drugs issued to Turks Island Government		4	5	6
		<hr/>		
		£18,012	17	11
		<hr/>		

During the year there were two examinations held under Law 34 of 1894, the Drugs and Poisons Law, at which 5 candidates presented themselves, including four from the Public Hospital. The candidates satisfied the examiners and were granted licenses.

Return shewing the quantity of quinine supplied from 1st January to the 31st December, 1920.

Quinine to Police for own use, No. 22400 16 lbs.				
Post Office for sale, packets of 5 grain doses		..	..	270,000
Post Office, for sale, packets of 3 grain doses		..	..	1,000
Post Office for sale, packets of 2 grain doses		..	..	1,000
Post Office for sale, packets of 1 grain doses		..	..	1,000
		<hr/>		
		273,000		
		<hr/>		

Doses of 5 grains to estates No. 21,700 15 lbs. 8 ozs.

do 5 grains to Parochial Boards No. 7000 5 lbs.

do 5 grains to Hospitals and Asylums No. 9275 6 lbs. 10ozs.

Total Receipts minus Police and Departments £44

Quinine Sulphate sent to Hospitals and Asylums 2231½ ozs., 139 lbs., 7½ ozs.

Quinine Sulphate sent to Parochial Boards 2550ozs. 15lbs. 15ozs.

Examination for Hookworm.

Hospitals.	Examined Locally.				Examined by Bacteriologist.			
	No. Examined.		No found Inf ected.		No. Examined.		No. found Inf ected.	
	Coolies.	Creoles.	Coolies.	Creoles.	Coolies.	Creoles.	Coolies.	Creoles.
Morant Bay ..	..	..	..	..	..	..	..	..
Hordley ..	10.	14.	6.	12.	..	..	..	..
Port Antonio ..	..	..	..	..	..	..	..	..
Buff Bay ..	77.	1,253	45	635	..	..	..	..
Annotto Bay ..	15.	31.	11.	23.	..	..	..	..
Port Maria ..	56	65	35	32	..	..	..	..
St. Ann's Bay ..	..	..	..	..	..	..	..	..
Cave Valley ..	..	..	..	..	..	..	..	1.
Falmouth ..	..	..	..	..	..	..	..	1.
Ulster Spring ..	..	..	..	..	..	..	..	..
Lucea ..	..	..	11.	7.	..	..	..	..
Montego Bay ..	..	..	..	..	..	..	..	..
Sav-la-Mar ..	13	17	13	17.	..	..	..	..
Black River ..	2.	148	2	..	..	..	..	..
Mandeville ..	..	86	..	52	..	74	..	44
Chapelton ..	..	..	..	..	..	19.	..	8
Lionel Town ..	120.	358	41.	119.	..	..	..	..
Spanish Town ..	..	..	..	..	..	..	..	..
Linstead ..	..	..	..	..	..	26.	..	24.
	293	1,983	160	1,013	..	121	..	78

2,299 cases were thymolised in the St. Catherine District Prison during the year and 1,466 were found to be infected while 10 cases were treated for hookworm in the General Penitentiary.

Five cases were thymolised on the estates in the Richmond Medical District.

District Patients Seen—The returns are as follows for the present and the three previous years:—

	1917-18.	1918-19.	1919-20	1920.
Constables ..	..	2,545	1,688	2,253
Prisoners ..	..	4,658	1,635	1,001
Paupers ..	..	13,239	7,987	7,115
Immigrants ..	..	9,586	5,157	1,938
Par. Midwifery Cases ..	..	122	102	94
Casual Paupers ..	..	4,977	13,479	8,069
Coolie Midwifery Cases ..	..	18	14	13
	<hr/>	<hr/>	<hr/>	<hr/>
	35,145	30,062	20,483	15,856

Return showing the number of patients treated under the Ticket System.

Parish.	1/-	2/-	3/-
Kingston	18	20
St. Andrew	29
St. Thomas	4
Portland
St. Mary	25
St. Ann	42
Trelawny
St. James	5
Hanover	3
Westmoreland	6
St. Elizabeth	3
Manchester	3
Clarendon
St. Catherine	3
	<hr/>	<hr/>	<hr/>
	18	142	20
	<hr/>	<hr/>	<hr/>

Return shewing the Number of Admissions to the Country Hospitals during the last 10 years.

Hospitals.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920.
Morant Bay	782	730	713	688	535	500	460	471	323	382
Hordley	918	1,294	1,777	1,431	1,305	1,094	911	684	495	468
Port Antonio	5,680	6,110	5,170	5,423	3,342	2,748	3,284	2,196	1,703	1,878
Buff Bay	1,341	1,961	3,516	3,494	2,187	2,235	1,963	1,648	1,415	1,445
Annotto Bay	5,558	5,169	4,440	3,934	3,282	2,238	1,929	1,583	1,008	1,175
Port Maria	2,627	2,532	1,984	1,931	1,320	1,192	1,053	1,228	885	1,103
St. Ann's Bay	274	414	429	394	406	406	492	514	367	379
Cave Valley	98	101	95	87	84	58	101	116	101	103
Falmouth	376	315	192	185	232	275	327	387	232	268
Ulster Spring				44	66	68	65	40	40	40
Montego Bay	494	796	871	698	830	700	611	553	685	610
Lucea	295	284	581	435	500	325	326	346	350	315
Sav-la-Mar	1,440	1,989	3,996	2,732	3,356	4,526	3,448	2,366	1,686	1,665
Black River	316	343	342	344	517	520	562	652	506	395
Mandeville	401	415	377	428	385	337	356	401	440	478
Chapelton	424	530	384	452	366	363	377	477	450	440
Lionel Town	2,547	2,497	2,636	1,802	1,792	2,588	1,674	1,718	1,727	1,628
Spanish Town	1,544	1,857	1,601	1,577	1,396	1,619	1,044	1,394	990	1,246
Linstead	195	494	458	395	293	311	370	403	372	393
	25,210	27,831	29,562	26,744	21,994	22,103	19,353	17,177	13,775	14,425

Admissions to the various Hospitals month by month for Malaria.

Hospitals.	January, 1920.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Morant Bay	7	1	2	4	3	3	11	6	16	7	8	10	78
Hordley	5	5	3	1	5	2	7	8	7	4	10	12	69
Port Antonio	17	8	3	9	6	9	40	46	65	48	34	37	322
Buff Bay	18	15	20	7	3	15	5	15	14	22	60	35	229
Annotto Bay	26	13	7	8	10	19	11	16	15	35	36	65	261
Port Maria	19	7	6	4	5	13	15	10	19	26	44	75	243
At. Ann's Bay	10	1	3	1	4	6	3	3	3	4	1	15	45
Cave Valley													
Falmouth	2	1	2	1	..	1	..	1	1	1	1	10	21
Ulster Spring													1
Montego Bay	8	4	4	3	6	7	6	5	8	2	6	15	74
Lucea	3	1	1	1	1	..	2	5	3	5	10	7	39
Sav-la-Mar	32	36	20	15	22	27	30	61	71	69	38	57	478
Black River	5	11	2	8	6	1	7	7	7	12	22	15	103
Mandeville	1	..	..	..	3	..	2	1	1	1	..	..	9
Chapelton	1	..	1	2	1	2	1	..	1	4	3	1	17
Lionel Town	42	55	55	24	25	13	23	25	11	18	11	20	322
Spanish Town	21	32	27	10	10	18	19	24	29	20	26	37	273
Linstead	3	2	3	3	3	2	1	6	8	3	5	9	48
Kingston	22	6	5	14	18	20	17	19	11	13	10	19	174
	242	198	164	115	131	158	200	258	290	295	325	439	2,815

DEATHS 1929.

Parish.	Total Deaths.	Not Medically Certified.	Deaths from Atrophy Icterus and Scleroma of New Born & other diseases peculiar to early infancy.		Total Deaths under one year.	Deaths from Ackee Poisoning.	Deaths from Enteric Fever
			Total Deaths.	Medically Certified.			
Kingston	2,040	281	179	112	503	1	92
Port Royal	19	3	6	6	10	..	..
St. Andrew	2,142	1,514	154	31	498	9	18
St. Thomas	1,049	751	60	8	285	2	6
Portland	1,316	964	92	12	392	4	16
St. Mary	1,482	1,061	93	1	426	17	16
St. Ann	1,530	1,277	67	5	411	6	12
Trelawny	943	786	50	1	27	14	17
St. James	995	729	39	4	326	2	8
Hanover	1,000	794	72	2	272	..	12
Westmoreland	1,549	1,180	57	3	474	4	11
St. Elizabeth	1,719	1,519	104	..	584	3	4
Manchester	1,375	1,194	66	3	336	..	12
Clarendon	1,901	1,582	118	6	542	3	13
St. Catherine	2,647	1,826	132	18	690	3	52
Whole Island	21,707	15,461	1,289	212	6,028	77	289

YAW.

Hospitals.	Number of injections.	Variety.			Previously injected.	Intravenous.	Intra-muscular.	Otherwise.	Symptoms cured.	Drug used.
		Total cases.	First.	Second.	General.	Crab.	Mixture.	Recurrent.	..	
Moran's Bay
Hordley	..	8	..	..	5	3	..	..	..	Novarsenobillon & Neo-Kharsivan.
Port Antonio	..	78	77	..	68	10	..	1	..	Novarsenobillon & Neo-Diarsenol
Buff-Bay	..	77	77	..	70	7	..	..	..	Novarsenobillon
Annotto Bay*	..	170	152	..	151	18	1	10	14	Novarsenobillon, Neo-Diarsenol & Neo-Kharsivan
Port Maria	..	11	11	..	10	1	..	..	..	Novarsenobillon
St. Ann's Bay	..	5	5	..	5	..	..	..	..	do
Cave Valley
Falmouth	..	3	3	..	3	..	..	..	..	do
Ulster Spring	..	2	2	..	2	..	..	..	..	do
Montego Bay	..	2	2	..	2	..	..	..	..	do
Lucea	..	222	214	..	150	71	1	8	..	Novarsenobillon, Kharsivan, Neo-Kharsivan, & Neo-Diarsenol
Sav-la-Mar
Black River	..	7	7	..	4	..	3	..	..	Novarsenobillon
Mandeville
Chapelton
Lionel Town
Spanish Town
Linstead	..	7	7	..	7	..	..	..	..	Neodiarsenol
	592	565	8	477	110	5	19	14	16	576
										591

*Includes cases of Syphilis.

Statement shewing the number of Patients treated for Hookworm in the Public General Hospitals during 1920

Hospitals.	Thymol.			Oil of Chenopodium.			Total.		
	Creoles.	Coolies.	Out-patients.	Creoles.	Coolies.	Out-patients.	Creoles.	Coolies.	Out-patients.
Morant Bay ..	..	..	..	2	..	1	2	..	1
Hordley ..	..	..	..	12	2	9	12	2	9
Port Antonio ..	..	..	..	1,255	130	..	1,255	130	..
Buff Bay ..	6	1	..	522	35	..	528	36	..
Annotto Bay ..	..	..	..	53	37	15	53	37	..
Port Maria ..	65	56	28	..	..	..	65	56	28
At. Ann's Bay ..	..	..	..	7	..	1	7	..	1
Cave Valley ..	1	..	..	..	..	..	1	..	..
Falmouth ..	1	..	..	..	..	..	1	..	..
Ulster Spring ..	..	..	..	..	..	..	..	..	9
Montego Bay ..	14	7	39	1	..	7	15	7	46
Lucea ..	..	..	..	34	2	163	34	2	163
Sav.-la-Mar ..	..	..	..	17	13	..	17	13	..
Black River ..	1	..	..	61	2	59	62	2	59
Mandeville ..	..	..	..	76	..	20	76	..	20
Chapelton ..	3	..	1	..	..	..	3	..	1
Lionel Town ..	83	38	..	13	3	..	96	41	..
Spanish Town ..	..	..	..	..	..	..	..	..	..
Linstead ..	2	41	..	..	..	..	2	41	..
	176	143	68	2,053	224	284	2,22	367	£ 352

Return shewing number of cases of Ackee Poisoning, Pellagra and Leprosy seen in the Districts.

District.	Ackee Poisoning.				Pellagra.				Leprosy.			
	Males.	Females.	Male Deaths.	Female Deaths.	Males.	Females.	Male Deaths.	Female Deaths.	Males.	Females.	Male Deaths.	Female Deaths.
Kingston
Lower St. Andrew
Stony Hill
Gordon Town
Morant Bay
Hagley Gap
Plan. Gar. River	} Manchioneal	.	1	.	.	.	3	.	.	.	.	.
Port Antonio		.	.	.	.	1	.	.	.	.	1	.
Buff Bay	2	2	.	.	.	.	.	.
Annotto Bay	.	.	.	2	.	.	.	.	.	.	.	.
Richmond	.	.	.	2	.	.	.	.	.	.	.	.
Port Maria	5	5	5	5	.	.	.	.	.	.	1	.
Gayle
St. Ann's Bay	.	.	6	1	.	.	.	.	.	.	.	.
Clarendon	3	1	3	1	.	.	.	.	.	.	2	.
Cave Valley
Brown's Town
Falmouth
Ulster Spring	10	8	1	.	.	.	.	.	.	.	.	.
Duncans
Montego Bay
Adelphi
Lucea
Sav.-la-Mar
Little London
Lamb's River	.	1	.	.	.	.	.	.	.	.	.	.
Grange Hill	1	.
Black River
Santa Cruz
Balaclava	3	7	.	.	.	.	.	.	.	.	.	.
Mandeville	6	4	5	3	.	.	.	.	.	.	1	.
Newport
Christiana
Chapelton
May Pen
Alley	2	1	1	.	.	.	.
Spanish Town
Old Harbour
Glengoffe
Linstead
Port Royal
Croft's Hill
	27	26	21	15	8	8	1	1	5	3	..	..

Return of the Classes of Patients treated in the several Public General Hospitals during the year ended 31st December, 1920.

29

TABLE No. 1.

Hospital.	Mortality Rate.			Largest Daily No.			Smallest Daily No.			Daily Average.			Date of smallest daily num- ber of Pa- tients.
	Coolies.	Creoles.	Total.	Coolies.	Creoles.	Total.	Coolies.	Creoles.	Total.	Coolies.	Creoles.	Total.	
Morant Bay	9.5	5.8	6.02	4	26	30	..	18	1	24	25	30.5.20	29.8.20
Hordley	3.1	3.7	3.6	4	41	45	1	13	14	2	30	32	19.1.20
Port Antonio	1.8	2.2	2.66	2	103	105	1	65	66	2	84	86	..
Buff Bay	4	4.5	4.65	13	84	97	1	38	39	2	69	71	24.4.20
Annotto Bay	3.5	5.2	4.65	25	67	92	14	33	47	14	64	78	9.12.20
Port Maria	2.7	3.3	3.2	30	66	96	5	44	49	13	58	71	6.1.20
St. Ann's Bay	..	6.1	..	29	29	..	15	.15	..	22	22	21.16.20	12.12.20
Cave Valley	..	3	3	..	16	16	..	7	7	..	11	11	23.10.20
Falmouth	..	..	11.93	11.82	..	27	27	..	16	1	22	23	21.4.20
Ulster Spring	..	3.2	3.2	..	8	8	..	1	1	..	5	5	..
Montego Bay	..	5.9	5.4	4	46	50	3	22	25	2	38	40	28.7.20
Lucea	..	5.75	5.7	..	31	31	2	14	16	1	23	24	26.9.20
Sav-la-Mar	..	.81	3.4	1.001	70	43	11	12	37	49	34	39	73
Black River	..	5.5	5.3	5.38	4	51	55	..	22	22	1	40	41
Mandeville	..	..	2.36	2.35	..	46	46	..	24	24	1	37	38
Chapelton	..	7.64	7.64	..	46	46	..	19	19	..	33	33	30.4.20
Lionel Town	..	3.59	3.88	20	65	85	12	45	57	24	50	74	1.5.20
Spanish Town	..	10.83	9.07	11	80	91	16	26	42	10	63	73	30.3.20
Linstead	..	4.6	6.19	8	38	46	..	27	27	1	37	38	27.8.20

TABLE 2.

Hospital.	Remaining in Hospital. 1.1.20			Admissions.			Discharged.			Died.			Remaining in Hospital. 31.12.20.		
	Coolies.	Creoles.	Total.	Coolies.	Creoles.	Total.	Coolies.	Creoles.	Total.	Coolies.	Creoles.	Total.	Coolies.	Creoles.	Total.
Morant Bay	..	17	17	21	361	382	19	315	334	2	22	24	..	24	24
Hordley	..	4	27	31	60	408	62	391	453	2	16	18	..	28	28
Port Antonio	..	2	74	76	161	1,717	1,878	158	1,601	1,759	3	49	52	2	67
Buff Bay	78	78	71	1,374	1,445	61	1,328	1,389	3	66	69	7	58
Annotto Bay	..	13	37	50	386	789	1,175	350	744	1,084	14	43	57	35	74
Port Maria	..	14	63	77	344	764	1,108	349	767	1,116	10	28	38	9	69
St. Ann's Bay	22	22	..	379	379	..	359	359	..	23	23	..	19
Cave Valley	11	11	..	103	103	..	105	105	..	3	3	..	11
Falmouth	14	14	6	257	263	6	223	229	..	23	23	..	25
Ulster Spring	4	4	..	59	59	..	58	58	..	2	2	..	3
Montego Bay	..	1	29	30	54	556	610	52	528	580	..	35	35	3	22
Lucea	19	19	3	312	315	3	288	291	..	21	21	..	22
Sav-la-Mar	..	40	29	69	1,197	468	1,665	1,226	383	1,609	9	16	25	37	40
Black River ²¹	32	32	36	359	395	33	342	375	2	21	23	1	28
Mandeville	31	31	2	471	473	2	448	450	..	11	11	..	43
Chapelton	31	31	..	440	440	..	401	401	..	36	36	..	34
Lionel Town	..	20	50	70	599	1,029	1,628	584	978	1,562	24	42	66	11	59
Spanish Town	..	16	27	43	304	942	1,246	302	791	1,093	12	105	117	6	73
Linstead	37	37	25	368	393	23	354	377	3	81	21	..	38

Statement of Operations in Public General Hospitals.			Cases.	Deaths.
	Cases.	Deaths.		
Abscesses—Incisions of	516	2	Hermotomy for Strangulated	
Scraping	1		Hernia	22 2
Abdominal Section—			Fractures—Simple and compound	215 1
Volvulus of Sigmoid	3	2	Male Generative Organs—Paraphymosis	16
Laparotomy	41	6	Radical Cure Hydrocele	24
Hysterectomy	9	1	Tapping Hydrocele	24
Oophorectomy	3		Circumcisions	304
Ovariectomy	3		Chancroids cauterizing	23
Estopic Gestation	3		Female Generative Organs—	
Washing out Stomach	6		Curetting	167
Paracentesis Abdominis	41		Atresia Vagina	7
Appendectomy	6		Vesico Vaginal Fistula	3
Aneurism—Ligation of Artery	7		Hysteropaxy	3
Amputations—			Rectum and Anus—	
Foot	14	1	Fistula in ano	8
Leg	48	2	Stricture of	5
Digits	59		Hæmorrhoids, Thermo-cautery	27
Toe	37	1	Trachelomphysis	1
Forearm	15	1	Removal of Placenta	2
Penis	6		Difficult Labour	13
Breast	8		Removal of Submucous Fibroid	1
Bladder and Urethra—			Imperforate Anus	2
Stricture, dilation of	236	2	Castration	5
Urethrotomy	12		Ovarian Cyst	1
Perineal Section	16	2	Reduction of Prolapsed Uterus	1
Perineal Abscess	8		Nails Removed	29
Perineal Sinues	1		Plastic Operation	2
Retention of Urine	65	1	Dislocations—	
Washing	1		Shoulder	3
Bones—			Elbow	2
Caries	4		Jaw	1
Necrosis	20		Finger	2
Osteotomy	3	1	Incisions, Cellulitis and Carbuncles	52
Periostectomy	4		Trehphining and cleaning Mastoid	
Sequestrectomy	32		cells	16
Ununited Fractures	25	1	Dilation of Cervix	1
Eye on Pterygium	6		Cauterising Chronic ulcers	25
Iredectomy	3		Tendons—Suturing of	52
Ext. of Cataractæ Iredectomy	2		Tenotomy	11
" " sine "	5		Tumours and Cysts—	
Needling Cataract	3		Carcinoma	12
Extrirpation of Globe	31	1	Anthræ Tumour	1
Foreign Bodies Removed from—			Bursal Tumour	1
Ear	4		Adenoids	12
Foot	12		Cystic Tumour of Jaw	4
Nose	1		Hæmatoma pectoralis Major	
Eye	12		Fibroma	16
Buttock	1		Lipoma	11
Hand	4		Lymphadenoma	1
Throat	3		Cyst	
Finger	2		Sebaceous Cyst	3
Thigh	1		Serratum	2
Face, Nose, Mouth etc.—			Examination under Chloroform	34
Nasal Polypus (vein)	11		Scraping chronic ulcers	83
Cutting Fraerum Lingual	1		Extraction of Teeth	351
Cleft Palate	1		Shin Grafting	6
Tonsils Removed	57		Suturing Wounds	99
Joints—			Removing Testicle	1
Arthrotomy	6		Slitting up Sinus	12
Incision of	1		Spinal Puncture	6
Reduction of	8		Venereal Warts	5
Anlylosis	6		Aspirating Chest	17
Excision	41		Paracentesis	5
Aspiration	7		Tracheotomy	1
Lymph Glands—			Keloid	
Excision of	57		Papilloma	3
Scraping and Cauterising	29			2
Hernia—				
Reduction of	1			
Radical Cure for	35			

	Cases.	Deaths.		Cases.	Deaths.
Breaking down Adhesions	4		Jaundice ..	..
Suprapubic Aspiration	2		Ackee Poisoning ..	..	4
Removing Tubercular Glands	13		Mumps ..	..	3
Ventrofixation ..	4		Whooping Cough ..	..	3
Goitre ..	1		Chicken Pox ..	..	2
Dilation of Os Uteri ..	1		Chancroids ..	..	3
	3,395	30			
Death Rate 88%.					
Statement of Diseases in Public General Hospitals.			Section 1—		
	Cases	Deaths.	Diseases of the Nerves	16	
Small Pox ..	..	..	“ Neuritis ..	79	
Measles ..	..	..	“ Meningitis ..	18	13
Typhus ..	..	..	“ (a) Cerebro-spinal	2	1
Dengue ..	..	..	“ (b) Tubercular	6	1
Influenza ..	..	..	“ (c) Other varieties	1	1
Diphtheria ..	..	1	“ Myclitis ..		
Febricula ..	..		“ Anterior Parietomyelitis ..		
Enteric Fever—			“ Hydrocephalus ..		
(a) Typhoid ..	268	88	“ Encephalitis ..		
(b) Paratyphoid ..			“ Abscess of Brain ..		
Cholera ..	..		“ Concussion of Brain	2	2
Plague ..	..			
Dysentery—			Sub-section 2—		
(a) Bacillary ..	15	3	Functional Nervous Disorders	3	1
(b) Amoebic ..	107	19	“ “ Apoplexy ..	21	
Yellow Fever ..	..		“ “ Paralysis ..	3	
Malarial Fever ..	1,922	33	“ “ Chorea ..	18	
(a) Intermittent ..	791	10	“ “ Epilepsy ..	21	
(b) Remittent ..	73		“ “ Neuralgia ..	24	
(c) Pernicious R. ..	17	6	“ “ Hysteria ..	4	
Black Water Fever ..	..	1			
Erysipelas ..	..	1	Sub-section 3—		
Pyæmia ..	..	2	Mental Diseases—		
Septicæmia ..	..	3	“ Idiocy ..		
Tetanus ..	..	16	“ Mania ..	4	
Tubercle—			“ Melancholia ..	4	
(a) Pulmonary Tuberculosis	109	31	“ Dementia ..	1	1
(b) Diseases of Bones	24	3	“ Delusional Insanity ..		
(c) Gland Affections	51	3	Paraplegia ..	..	1
(d) Disease of joints	17	1	Diseases of the Eye ..	264	
(e) T.B. Hip. ..	..	1	“ Ear ..	66	
Leprosy—			“ Nose ..	13	4
(a) Tubercular ..			“ Circulatory System	183	18
(b) Anæsthetic ..			“ Respiratory System	776	66
Yaws ..	..	278	“ Digestive System	1,019	90
Hydrophobia ..			“ Lymphatic System	184	2
Syphilis ..			“ Urinary System	557	53
(a) Primary ..	292		“ Generative System	27	
(b) Secondary ..	145	4	“ Male Organs ..	366	
(c) Tertiary ..	59	3	“ Female Organs	543	
(d) Inherited ..	203	5	“ Organs of Locomotion	218	7
Gonorrhœa ..	..	660	“ Cellular Tissue	321	2
Scurvy ..	..	2	“ Skin ..	559	
Alcoholism ..	..	2	“ Connective Tissue	45	1
Delirium Tremens ..	..	1			
Rheumatism ..	..	355	Ulcers of Lower extremity—		
Rheumatic Fever ..	..	2	Any disease not already shown in		
Gout ..			this Report ..	959	1
New Growth, non-Malignant	81	3	Alastrim ..	16	1
New Growth, Malignant ..	43	3	Peritonitis ..	1	1
Anæmia ..	..	64	Parturition ..	4	1
Diabetes Mellitus ..	..		Cyst ..	1	
Diabetes Insipidus ..	..		No disease ..	658	
Debility ..	..	13	Gangrene ..	3	
Beri Beri ..	..		Periostitis ..	1	
Pellagra ..	..	8	Foreign Body ..	4	
		2	Deformity ..	1	
			Anaphylaxis ..	1	
			Eclampsia ..	35	6
			Prematurity ..	1	

	Cases.	Deaths.		Cases.	Deaths.
Pneumonia ..	66	25	7 Ringworm ..	..
Injuries, General ..	388	24	8 Pediculosis ..	..
" Local ..	1,258	18	9 Myiasis ..	..
Surgical Operations ..	1,396	14	10 Itch ..	..	7
Minor Operations ..	54		11 Any other variety ..	..	8 1
Malformations ..	5		N.A.D.		
Poisons ..	7	1	Puerperal Fever ..	..	7 2
Hookworm Disease ..	301	8	Undefined Fever ..	..	1
Parasites, Infection by—			Cirrhosis of Liver ..	..	1
1 Anchyllostoma Duodenale	142		Childbirth ..	..	2
2 Tænia Solium ..			Chronic Ulcers ..	..	17
3 Ascaris Lumbricos ..	62	1			
4 Oxynris Vermicularis ..			No. of Patients ..	..	15,433
5 Trichinæa Spiralis ..			No. of Deaths ..	..	621
6 Filarial Diseases ..			Mortality Rate ..	..	4%

I have the honour to be,

Sir,

Your obedient Servant,

F. Langley Hunt,
Superintending Medical Officer.

Report of the Quarantine Board.

30th June, 1921.

The Chairman & Members of the Quarantine Board.

Gentlemen,

The year under review, January 1st to December 31st, 1920, commenced with this Island practically surrounded with Quarantinable Diseases and while some places have managed to eradicate the disease with which they were infected, others have become infected, so that at the end of the year conditions cannot be said to have much improved.

2. During January and February Influenza broke out in Port Limon, Colon and Cuba. It however died out by the end of May, and while the Epidemic was not so virulent as 1918-19, it was sufficiently severe to call for Quarantine Measures—the disease having been made quarantinable—which were successful in keeping it out of Jamaica.

3. In April 1920 Plague made its appearance in Tampico and Vera Cruz, Mexico, and cases are still occurring.

4. In June Plague developed in Pensacola. There have not been any human cases for some months now, but infected rats are still being found.

5. In July Plague spread to Galveston, Beaumont and Port Arthur. Energetic measures for its eradication were taken at once by the United States Public Health Service, and those places now appear to be free from the disease.

6. New Orleans has not had any cases of human Plague for months, and for a considerable time no infected rats were found. Unfortunately Rat Plague appeared in considerable numbers necessitating the re-imposition of restrictions. The situation however is well in hand and at an early date it will no doubt be possible to again withdraw all restrictions.

7. In July a case of Plague was reported from Liverpool, but fortunately the disease did not spread. There being the one case only.

8. In October, in addition to its other afflictions, Plague visited Dublin. We have no direct communication with that city. As no further reports have been received it would appear that it has been eradicated.

9. In November Plague appeared in Ponta Delgada, Azores, and cases are still occurring.

10. During the year Yellow Fever has been present in Mexico, Brazil, Peru, Ecuador, Honduras, Nicaragua (P.C.), San Salvador, Buenaventura, St. Kitts and Guatemala. Only one case occurred in St. Kitts. Buenaventura is again free from the disease. It is however still prevalent in Ecuador, Mexico, Peru and Brazil. Cases have not been reported lately from Honduras and Nicaragua.

Only a few cases occurred on the Atlantic side of Guatemala, about 60 miles from Puerto Barrios. It has however been stamped out.

11. Smallpox has been prevalent to an unusual degree during the past year. It has been present on the Isthmus of Panama for some time, but in a mild form.

12. In January several cases occurred in Cuba. Numerous cases of Alastrim also have occurred

in the province of the Orient. No deaths have been reported, and it is accepted that the disease is the same as the Alastrim in Jamaica.

13. In September Smallpox broke out in Haiti, and while the number of cases is not exactly known, there has been at least 2,000 with a large percentage of deaths. The Epidemic shows signs of abating.

14. In February a case of Smallpox was removed from the S.S. "Vestnorge" to the Quarantine Station.

15. A launch has at last been obtained for boarding purposes at Port Royal, and while it can only be regarded as a temporary one, it is giving good service, and will hold out until a good launch is obtained. It has been of great assistance to the Health Officer and facilitates him greatly in the performance of his duties.

16. The Lighter for the Disinfector which foundered in March 1920, has not yet been replaced, due to the difficulty of getting one built. The Disinfector cannot be used at present, and the Quarantine Service is greatly handicapped in the performance of its duties. It is hoped that a lighter may be available at an early date.

17. In February Lt. Owen, D.S.C., was appointed a Member of the Quarantine Board.

18. In April 1920 the Quarantine Board sustained a great loss by the resignation of Dr. F. H. Saunders. Dr. Saunders has been a member of the Board for many years, during which period he rendered invaluable service to Quarantine.

19. Dr. C. A. H. Thomson was appointed a member of the Board to fill the vacancy caused by the resignation of Dr. Saunders.

20. In May Lt. Owen was granted leave of absence, and Dr. Allwood in November.

21. During the early part of the year the Telephones to Port Royal gave a very poor and unreliable service. The system has now been overhauled and the defects remedied as far as possible, and it is now giving good service. The Metallic System should be continued to Port Royal as soon as possible. The United Fruit Company kindly allowed their Superintendent of Telephones, Mr. Hossack, to examine the system and on his report, changes were made which has greatly improved the system both as regards hearing and reliability.

22. The Quarantine Station is now connected by Telephone with the Health Officer at Port Royal. The Senior Military Officer having kindly lent a Cable to the Board.

23. The New Isolation Ward at the Quarantine Station is now well advanced and will be completed at an early date. The Quarantine Stations at Montego Bay and Port Antonio have not been commenced.

24. During the period under review 1,105 vessels were examined by the Health Officer at Port Royal.

25. During the year 445 persons were detained at the Quarantine Station, and during the same period 1,885 packages of baggage and 235 sacks of Mails were disinfected.

26. Fifty-seven vessels were fumigated during the year, for which £181 13s. was received and lodged in the Treasury.

I have the honour to be,

Gentlemen,

Your obedient Servant,

CHARLES DON,
Scyty. Quarantine Board.

Report of the Bacteriological Laboratory.

Pathological Laboratory,
Public Hospital, Kingston,
29th June, 1921.

Sir,

I have the honour to present my report on the working of the Bacteriological Laboratory for the period July to December, 1920.

I assumed duties on the 30th June, 1920, and spent a few days in getting the Laboratory clean and in something like working order after its closure in April last.

Certain suggestions as to new apparatus and structural improvements in the Laboratory have been submitted by me to the Government and were approved by His Excellency the Governor as far back as September 1920; part of these alterations to be put in hand at once and the rest to come on the estimates for 1921-1922. Up to the present the new apparatus has arrived and has been duly installed, but none of the other alterations have been completed, partly I believe owing to the non-arrival of some of the fixtures from England.

During the period under review Research work was undertaken in connection with the epidemic of Alastrim, and a full account of the work to date was sent in my Six-monthly report for the period ending March 1921.

As regards the routine work of the Laboratory 3,136 specimens have been examined and a series of Tables are appended. These explain themselves, but I desire to draw attention to the three following points, two of which are not shown on the Tables submitted:

1. *The large number of positive Widal reactions which have occurred.*—In December of 173 Bloods sent for Examination, 94 or more than 54% were positive, and for the whole period of seven months 303 or nearly 40% of the Bloods examined were Positive. Of these 303, 148 came from Kingston.

These figures are exclusive of a large number of cases which are diagnosed on clinical symptoms only. As a matter of fact the number of cases notified during this period is 739. Typhoid is thus very prevalent and the incidence of this disease raises the question of the advisability of a campaign of protective inoculation in the interest of Public Health.

2. *The percentage of Sputa shewing the presence of Tubercle Bacilli.*—Of 341 Sputa examined for the presence of Tubercle Bacilli more than 40% shewed the organism—a very uncomfortably high proportion. 485 cases were notified during this period.

3. *In view of the present interest in Venereal Diseases* it is noteworthy that of the 428 bloods examined for Syphilis by the Wasserman Reaction 212 were Positive.

I have included in the Report such figures for April 1920 as I have been able to obtain.

I have the honour to be,

Sir,

Your obedient servant,

L. M. Moody,
Government Bacteriologist.

The Honourable,
The Superintending Medical Officer,
Kingston.

I.—*Details of Specimens dealt with at the Laboratory during the 9 months April, 1920 to December, 1920.*

	April.*	July.	August.	Sept.	Oct.	Novr.	Decbr.	Totals.
Bloods for Widal's reaction	37	92	101	98	132	137	173	770
Faeces for Ova	44	74	113	29	40	60	39	399
Faeces for Dysentery	17	11	11	6	16	7	11	78
Blood Smears	5	27	31	15	22	30	31	161
Pus Smears	4	4	5	16	5	10	3	47
Urides	20	55	51	28	37	55	60	306
Sputa	20	38	40	56	54	55	77	341
Tissues	6	9	11	8	5	4	4	47
Waters	1	10	12	3	18	5	6	55
Autopsies	1	1	8	5	11	3	..	29
Wassermanns	..	32	40	43	81	84	81	361
Rats	..	..	..	..	48	34	33	426
Miscellaneous	58	48	91	64	58	63	42	115
Totals	..	214	403	514	371	527	547	560
								3,136

* Laboratory closed in May and June.

II.—*Number of Sera examined for Enteric by Widal's Reactions, April 1920 to Dec. 1920..*

Month.	Total.	Positive.	Negative.	Doubtful.
April	37	7	23	7
May*	..	..	..	..
June*	..	..	..	..
July	92	35	41	16
August	101	35	55	11
September	98	21	61	16
October	132	62	47	23
November	137	49	55	33
December	173	3	64	15
Total	770	303	346	121
Percentage	..	39.35	44.9	15.75

* Laboratory closed.

III.—Districts from which Bloods have been sent for Widals Reaction for Enteric Fever, with results, April 1920 to December, 1920.

Districts.	Positive.	Negative.	Doubtful.	Total.
Kingston	148	22	74	451
Spanish Town	66	32	12	110
Buff Bay	15	23	14	52
Lionel Town	21	15	4	40
Linstead	10	7	..	17
Mandeville	2	4	2	8
Halfway Tree	3	3	2	8
Annotto Bay	3	2	3	8
Lucea	1	3	..	4
Morant Bay	1	2	..	3
Gayle	5	1	2	8
Montego Bay	4	4	2	10
Falmouth	3	..	..	3
Cave Valley	2	..	..	2
Clarks Town	2	..	2	4
St. Ann's Bay	6	3	1	10
Maivern	1	..	..	1
Gordon Town	1	..	..	1
May Pen	..	1	..	1
Golden Grove	..	..	1	1
Port Antonio	..	..	1	1
Brown's Town	1	..	..	1
Others	8	17	1	26
Total	303	346	121	770
Percentage	39.35	44.9	15.75	

IV.—Results of Examination of Faeces for Helminthiasis.

Districts.	Number sent.	Ankylostomiasis only.	Ascaris only.	Trichocephalus only.	All Three.	Anky. & Ascaris.	Anky. & Trichocephalus	Ascaris & Trichocephalus	Negative.
Kingston	196	39	10	15	15	10	17	7	83
Spanish Town	12	33	1	10	30	12	25	4	13
Chapelton	13	3	..	3	..	1	..	3	3
Falmouth	1	..	..	..	..	..	1	..	..
Cave Valley	3	1	..	..	..	..	2	..	..
Mandeville	27	3	..	2	4	6	5	2	5
Lucea	4	1	1	2	0	..	..	..	..
Linstead	20	2	..	1	7	2	7	..	1
Others	7	2	..	1	2	2	..	..	..
Total	399	84	12	34	58	33	57	16	105
Percentage	..	21.1	3.0	8.5	14.5	8.3	14.3	4.0	26.3

Report of the Leper Asylum.

Jamaica Leper Asylum,
14th July, 1921.

Sir,

I have the honour to submit my Report on the working of this Institution for the calendar year ending 1st December, 1920.

Administrative Staff, etc.—I have to specially commend Mr. E. A. A. Levy, the Superintendent and Miss Margaret McPherson, the Matron. These two officers have worked well and owing to the capable and intelligent manner in which they carried out their respective duties, the work in the Home has been carried on in a very satisfactory manner.

Occupation.—It is pleasing to record that much has been done to provide work for the inmates—Agricultural pursuits in the Farm and general work in the Institution—the inmates thus earned a total

sum of £210 15s. 4d. The amount paid for Farm produce was £108 8s. 4d., and general work washing, cleaning, etc., £102 7s. 0d.

Discipline.—No serious breaches of the Rules have occurred. Few offences of a trivial character were dealt with.

Gifts.—My thanks are due to the Jamaica Times for a regular supply of their weekly paper, free to the inmates and the staff.

To Miss Cushmore of 1 Park Road; Radlett, England, for the supply of Illustrated Papers. To the Educational Supply Coy. for much reading matter. The inmates greatly appreciate these gifts. My thanks are also due to the Hon. Geo. McGrath, Custos of the Parish, and to the several ladies and gentlemen who so liberally contributed to the Annual Christmas Treat for the unfortunate inmates.

Religious Ministrations.—The Rev. Canon Grange assisted by Lay Readers attend to all the Religious duties of the Anglican Body; Service is held regularly every Sunday in the Chapel.

I regret to record the death of Miss Ann Mackglashan, which took place in Kingston on the 10th October, 1920. For many years she was a constant visitor to the Home, and her death is very much lamented by the inmates and whose place it will be very difficult to fill. Her whole life was devoted along with her sister, for the good of the inmates. As a mark of respect the bell was tolled at 4.30 p.m. on the 11th October, the hour her body was being interred at the Halfway Tree Parish Church, and a special service was held in the Chapel at which all the inmates attended.

The Rev. Father Grewen, S.J., the Sisters at the Convent and the Misses Leon give their attention to the spiritual comforts of the Roman Catholic inmates.

The Buildings.—The Institution needs several repairs and I hope the Public Works Department will soon begin the necessary and much needed work.

Statistics.—At the beginning of the year there were 108 inmates, 65 males and 43 females. Of this number there were 7 male East Indians and 1 female. There are 8 children in the Institution under 15 years of age (6 boys and 2 girls). The year closed with 102 inmates on the Register.

District Medical Officers' reports show that Leprosy is now a rare disease and the future is very hopeful. The vigilance of the Police and the provisions of the Leper Asylum Law are factors in bringing about this desirable result.

During the period under review 17 were admitted, one being a re-admission, 5 were discharged under the provision of Law 15 of 196, one absconded.

The death-rate was 13.6 per cent.

Treatment.—The general consensus of opinion is that in Chaulmoogra Oil we have the nearest approach to a specific for leprosy and the form we find here that gives best results in all cases, showing arrest of the disease both in Tubercular and Anaesthetic forms is Antileprol—a purified form of the oil. This treatment is being carried out.

Dr. Caustan of Natal, South Africa, is using Stibium, a Collodial Antimony, and has written a Report in the British Medical Journal of the 4th December, 1920, of the success he has met with. A fair trial, in selected cases, will be given in this Institution.

It is a pity that those who seek admission enter the Asylum when the disease is far advanced. The impression on many sufferers is that the "Home" is a Penal Settlement. It is an Institution where every effort is made to alleviate the disease and place the unfortunates in a healthy spot with cheerful surroundings.

The usual appendix of Tables is attached.

I have, etc.,

J. H. PECK,

Medical Attendant.

Hon. Dr. E. L. Hunt, C.M.G., S.M.O.
Kingston.

TABLE No. I—General Statistics for the year ending 31.12.1920 from 1st January 1920 to 31.12.1920.

	Males.	Females.	Total	Remarks
Remaining in Asylum 1.1.20	65	43	108	
Admitted during 1.1.1920 to 31.12.20	14	3	17	1 re-admission
Discharged 1.1.1920 to 31.12.1920	5	..	5	
Absconded " "	1	..	1	
Died " "	10	7	17	
Remaining in Asylum 31.12.1920	63	38	102	
General death rate ..	13.6 per cent.			

TABLE No. II.—Comparative Statistics from 1st October, 1887, to 31st December, 1920.

Year.	Admissions.		Discharges		Deaths.		Remaining at end of Year.		Death rate per 100.	Re-admission of Lepers.
	Lepers.	Non-Lepers.	Lepers.	Non-Lepers.	Lepers.	Non-Lepers.	Lepers.	Non-Lepers.		
1878-79	26	39	2	40	10	3	40	31	10.31	..
1879-80	26	43	8	31	7	..	51	33	5.	..
1880-81	39	101	16	72	11	4	63	58	6.69	..
1881-82	38	115	23	107	13	5	65	61	6.50	..
1882-83	40	85	22	96	8	3	75	47	4.38	..
1883-84	30	71	26	63	9	3	70	52	5.38	..
1884-85	33	87	18	80	14	..	71	59	5.78	..
1885-86	39	131	17	114	16	2	77	74	6.	..
1886-87	25	141	17	130	16	6	69	79	6.94	..
1887-88	32	8	..	19	23	8	78	60	16.48	..
1888-89	31	93	4	98	11	6	94	49	6.48	..
Oct., '89 to March '90	9	22	6	35	12	2	82	37	8.04	..
1890-91	34	67	15	88	15	2	86	14	7.74	..
1891-92	38	2	8	9	15	2	106	5	12.16	..
1892-93	26	1	16	4	1	..	100	2	8.27	..
1893-94	23	2	24	3	20	..	79	1	15.74	7
1894-95	26	1	12	..	18	..	76	2	16.82	14
1895-96	37	2	8	4	10	..	94	..	8.62	10
1896-97	40	2	11	2	16	1	106	..	12.5	9
1897-98	38	1	3	2	13	..	127	..	8.96	3
1898-99	20	2	8	3	20	..	118	..	13.6	5
1899-1900	27	3	3	2	20	..	122	1	13.5	6
1900-01	19	3	6	2	15	..	120	2	10.3	1
1901-02	9	1	4	..	14	2	110	2	11.4	2
1902-03	19	..	2	2	17	..	108	2	13.	3
1903-04	33	3	5	3	20	..	117	1	13.7	1
1904-05	25	..	5	..	23	..	114	1	16.1	2
1905-06	19	..	3	..	14	..	115	1	10.4	3
1906-07	14	..	1	..	15	..	113	1	11.62	1
1907-08	12	..	5	1	14	..	105	..	11.1	..
1908-09	24	..	..	1	15	..	112	1	11.6	4
1909-10	12	1	7	..	10	6	102	2	12.27	..
1910-11	24	..	6	1	15	1	103	1	12.6	4
1911-12	25	1	5	1	10	..	113	1	7.7	1
1912-13	12	2	2	1	14	..	109	2	10.9	2
1913-14	21	1	5	..	8	..	117	3	6.	..
1914-15	19	2	12	1	9	1	115	3	7.	..
1915-16	29	1	10	1	16	..	118	3	10.8	6
1916-17	20	..	8	..	11	..	119	3	7.8	2
1917-18	19	..	8	..	20	..	110	3	14.2	2
1918-19	19	1	1	..	16	..	112	4	12.	7
1919-1920	10	..	7	1	12	..	102	4	9.5	3
1920 (1.1.20 to 31.12.1920)	17	..	5	1	17	..	101	1	13.6	1

TABLE No. III.—Return of Admissions from 1.1.20 to 31.12.20.

No.	Names.	Age years.		Colour.	Form of Leprosy.	Years Afflicted.	If Re-Admitted	Country.	Late Residence.	Date of Admission.
		M	F.							
1	P.	34	F.	East India Black.	T.	5 years	No.	India	St. Mary. Clarendon.	6.1.20. 4.2.20.
2	J. F.	40	F.		A.	10 years.	No.	Jamaica.		
3	J. A.	19	..	Brown	T.	2	No.	Jamaica	St. Ann	7.4.20
4	J. B.	30	..	Black	T.	3	"	"	St. Elizabeth	11.4.20
5	C. B.	24	..	"	T.	2	"	"	St. Elizabeth	11.4.20
6	C. C.	20	..	Brown	A.	3	"	"	Manchester	3.6.20
7	H. R.	22	..	Black	T.	3	"	"	St. James	18.6.20
8	S. B.	30	..	"	A.	1	"	"	Manchester	19.6.20
9	L. T.	..	60	"	A.	40	"	"	St. Ann	8.7.20
10	V. J.	..	60	"	A.	4	"	"	St. Ann	8.7.20
11	I. C.	2	..	"	A.	2	"	"	St. Catherine	9.7.20
12	R. T.	19	..	"	T.	1	"	"	Clarendon	24.8.20
13	G. C.	26	..	Brown	A.	1	No.	India	St. Mary	27.8.20
14	B. H.	38	..	"	T.	3	Yes	India	St. Mary	22.10.20
15	R. A.	50	..	"	A.	9	No.	India	St. Mary	22.12.20
16	B. C.	..	13	Black	T.	3	No.	Jamaica	Manchester	22.12.20
17	H. H.	31	..	White	T.	1	"	Syria	Portland	23.12.20

TABLE IV.—Birthplaces of those admitted in 1920 (1st January, 1920 to 31.12.1920).

Birthplace.		Male.	Female.	Total.
India	..	4	..	4
Syria	..	1	..	1
St. Ann	..	1	2	3
St. Elizabeth	..	2	..	2
Manchester	..	2	1	3
St. James	..	1	..	1
St. Catherine	..	1	..	1
Clarendon	..	2	..	2
Trelawny	..	..	..	..
Kingston	..	..	..	..
		14	3	17

TABLE V.—Return of Discharged, 1st January, 1920 to December 31st 1920.

No.	Names	Country Late residence.	Age years.		Colour.	Date of Admission	Date of discharge.	Time afflicted.	Form of Leprosy.	Authority for Discharge.
			M.	F.						
1	C.L.	Clarendon	19	..	Brown	10.3.1915	25.6.20	9 yrs.	Tubercular	Sec. 8 Law 15 of 1896
2	N.F.	Trelawny	20	..	"	7.8.14	31.5.20	7 "	Not leper	Sec. 9 Law 15 1896
3	F.T.	Cuba	17	..	"	22.5.15	27.4.20	6 "	Tubercular	Sec 9 Law 15 of 1896
4	G.C.	India	26	..	East Indian	27.8.20	1.12.20	2 "	Anæsthetic	Absconded
5	H.U.	Kingston	20	..	"	30.5.17	30.8.20	6 "	Tubercular	Sec. 8 Law 15 of 1896
6	E/C.	St. Catherine	26	..	Black	28.2.18	28.6.20	7 "	Anæsthetic	Sec 8 Law 15 of 1896

TABLE VI.—Birthplaces of those discharged 1920, 1 January 1920 to 31st December, 1920.

Birthplace.		Male.		Female.		Total.	Remarks.
		M.	F.				
Clarendon	..	1	..	..	..	1	
Trelawny	..	1	..	..	..	1	
Cuba	..	1	..	..	..	1	
St. Catherine	..	1	..	..	..	1	
Kingston	..	1	..	..	..	1	
St. Elizabeth	..	..	..	..	..	..
Westmoreland	..	..	..	..	..	..
St. Ann	..	..	..	..	..	..
India	..	1	..	..	..	1	
		6	..	..	..	6	

TABLE VII.—Return of deaths in 1920 1st January, 1920 to 31st December, 1920.

No.	Name.	Age years.		Colour.	Country.	Date of admission	Date of Death.	Form of Leprosy	Total years afflicted.	Cause of death.
		M.	F.							
1	H.W.D.	52	..	Brown	Jamaica	4.1.15.	8.2.20	T.	10	Chr. Diarrhoea
2	A. G.	..	24	"	"	4.12.06	13.2.20	A.	14	Pul. Tuberculosis
3	L/A.	..	33	Black	"	1.2.19	19.2.20	A.	10	Pneumonia
4	E/L.	..	62	"	"	27.6.14	16.3.20	A.	12	Chr. Diarrhoea
5	E/W.	..	53	"	"	3.3.17	27.4.20	A.	14	Chronic Diarrhoea
6	W/M.	24	..	Brown	"	16.12.08	2.6.20	T.	12	Nephritis
7	L/S.	22	..	White	"	18.6.15	5.6.20	A.	12	"
8	A. P.	27	..	Black	"	13.8.13	3.7.20	T.	9	Chronic Diarrhoea
9	J. B.	30	..	"	"	11.4.20	9.10.20	T.	4	" "
10	J. Bu.	21	..	"	"	19.6.18	17.10.20	T.	4	Pul. Tuberculosis
11	A/Bo.	..	43	Brown	"	11.4.11	22.10.20	T.	11	Chronic Diarrhoea
12	J. F.	60	..	Black	"	8.9.18	23.10.20	A.	13	" "
13	Ler./S.	21	..	White	"	18.6.15	4.12.20	A.	13	Pul. Tuberculosis
14	H.C./B.	58	..	Black	"	4.4.05	5.12.20	A.	25	Chronic Diarrhoea
15	Jz/B.	..	30	"	"	27.1.15	8.12.20	T.	8	Bright's Disease
16	Adj.F.	..	33	"	"	24.8.06	8.12.20	T.	16	" "
17	Ag./H.	..	63	"	"	9.1.15	27.12.20	A.	26	Chronic Diarrhoea

Average longevity of the disease in those who died:—

Anæsthetic males 18 years

Anæsthetic females 12½ " "

Tubercular males 8 "

Tubercular females 11 8-12 "

General Death Rate ■ 13.6

TABLE VIII.—Birthplaces of those who died in 1920, 1st January, 1920 to 31st December, 1920.

Birthplace.	Male.	Female.	Total.	Remarks.
St. Catherine	2	1	3	
Trelawny	3	..	3	
Clarendon	2	2	4	
St. Elizabeth	3	..	3	
Kingston	..	1	1	
Manchester	..	1	1	
Portland	..	1	1	
Westmoreland	..	1	1	
Totals	10	7	17	

TABLE IX.—Chief Intercurrent Diseases treated during 1920 (1st January, 1920, to 31st December, '20).

The usual run of intercurrent diseases noted during the past years continued for the period under review and do not call for special observation. I have pointed out that insane patients give much anxiety due chiefly to want of suitable accommodation and no staff.

In the case of the deaf-mute leper with intercurrent of *Satyriasis*, I have to keep him under extraordinary observation.

17 Inmates developed Alastrim (9 females and 2 males) No deaths

TABLE X.—Farm produce received from the Inmates' Farm during 1920—1st January, 1920 to 31st December, 1920.

Date. 1920.	Red peas.	Sweet Potatoes.	Pumpkins and vegetables.	Herbs for tea.	Yams.	Breadfruit.	Water cocoanuts.	Ripe Pears.
Jany., Feby., & March	lbs.	lbs.	lbs.			No.	No.	No.
April	342 $\frac{3}{4}$	99	352 $\frac{1}{2}$	16	43		..	..
May	200 3-16	287 12-16	213 8-16	6	..	..	50	..
June	237 6-16	100	218 8-16	4	..	..	40	..
July	204 6-16	170.8-16	40.12-16	6	..	..	60	..
August	216 1-16	1116.12-16	10.	4	..	..	62	..
September	101.	2217.	..	4	..	34	40	..
October	4-16	1754.	..	8	..	75	61	61
November	..	872 8-16	..	4	..	..	72	..
December	..	789	..	4	151	..	80	..
Totals	100.	694 8-16	100.	..	255	..	60	..

TABLE XI.—Money paid to Inmates during 1920, 1st January, 1920 to 31st December, 1920 under Rule 80.

Date.	Farm produce.	Labourers.	Extra nursing.	Washing.	In- dulgencies	Special work.	Equipt.	Total.
1920.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	s. d.	s. d.	£ s. d.
Jan., Feby.	12 8 0	10 11 3	4 2 4	3 8 0	7 15 11	4 6	..	38 10 0
March	6 15 11	3 5 0	1 2 4	1 1 6	2 10 8	1 6	..	14 16 11
April	6 2 7	4 1 3	1 4 7	1 6 0	0 0 0	0 0	..	12 14 5
May	8 7 0	3 5 0	0 18 5	1 1 0	3 2 11	1 6	..	16 15 10
June	14 9 4	4 1 3	1 2 6	1 5 6	5 14 2	3 0	..	26 15 9
July	11 11 7	3 5 0	0 18 0	1 1 0	..	..	..	16 15 7
August	20 7 8	3 5 0	0 18 0	1 0 0	4 10 6	3 0	12 4	30 16 6
September	6 11 0	4 1 3	1 2 6	1 7 6	3 1 10	1 6	2 1	16 7 8
October	9 12 6	3 5 0	0 18 0	1 1 0	2 9 9	1 6	..	17 7 9
November	12 2 9	3 5 0	0 18 0	1 2 0	2 7 2	..	..	19 14 11
Totals	108 8 4	42 5 0	13 4 8	13 13 6	31 12 11	16 6	14 5	210 15 4

Financial Statement of Lepcr Asylum, 1920.

Items.	Vote.	Expended.	Un-expended	Over-expended.	Average cost per inmate per year.	Average cost per Diem.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	d.
Personal Emoluments	868 4 0	770 6 0	97 18 0			
Wages	328 0 0	406 6 10	..	78 6 10	11 3 8	7.33
Religious Ministrations	20 0 0	20 0 0	..			
Maintenance	1,463 17 8½	1,939 17 7	..	475 19 10½	18 2 7	11.89
Christmas Dinner	10 0 0	9 4 9	0 15 3			
Fuel, Light, etc.	171 15 0	211 13 7	..	39 18 7		
General Equipment	362 10 0	595 18 3	..	233 8 3		
Water Rates	30 0 0	22 10 0	7 10 0			
Funeral Expenses	15 5 0	24 3 0	..	8 18 0		
Contingencies	16 0 0	12 10 9	3 9 3			
Transport of Levers	72 5 0	68 13 0	3 12 0	..	9 7 0	6.13
Recreation Fund	10 0 0	5 5 3	4 14 9			
Farm	10 0 0	3 6 8	6 13 4			
Indulgencies	54 0 0	46 3 5	7 16 7			
Special work for inmates	30 0 0	0 18 6	29 1 6			
Taxes and repairs to Cart	0 12 6	..	0 12 6			
Purchase of Cart,						
Donkey and harness	4 10 0	..	4 10 0			
Nurses uniform	15 15 0	..	15 15 0			
	3,482 14 2½	4,136 17 7	182 8 2	836 11 6½	38 13 3	25.35

REPORT OF THE JUBILEE MATERNITY HOSPITAL.

Jubilee Hospital Kingston, May, 23rd 1921.

Sir,

I have the honour to submit the report of the Victoria Jubilee Hospital for the year.

The number of patients admitted during the year was 800; there were 11 deaths, 1 from accidental Haemorrhage, 1 from Typhoid Fever, 1 from Heart Failure, 1 from Peritonitis, 2 from Acute Nephritis, 1 from Uralmia and 3 from Puerperal, Convulsions, 179 were found to have Albumen in their urine on admission, 690 patients resided in Kingston, 95 in St. Andrew and 15 came from more remote parishes. The number of infants born was 747, 374 males, 373 females. There were 12 cases of twins and one case of triplets, 58 infants were still born, 33 of this number had not reached full term and were macerated. 29 babies died 20 of these were premature, 7 had to be resuscitated and only lived a few hours after birth. One baby was born with Alastrim in an advanced stage. The mother had been vaccinated exactly one month before the birth of the child and had never had the disease herself.

The epidemic of Alastrim had a disastrous effect on expectant mothers causing in a number of cases miscarriages, the children born showed the Pox marks of Alastrim.

The following gifts were received during the year:—

2 boxes of oranges from Mrs. Abrahams, Chapelton, Mrs. Delgado a basket of fruit, sweets and cakes, Mrs. Whittles £1.

To the Nurses Xmas Dinner—Dr. Cameron a ham, Dr. Grabham a turkey, Nurse Maud Thomson (a former pupil) 2 dollars Mrs. Bourne, 5/-; Miss McCarthy, Crackers and table decorations, Miss Lambert, Candies; Dr. C. A. H. Thomson also very kindly remembered the Nurses. We tender our grateful thanks to Mrs. Orpen for the very useful bundle of baby gowns which are much appreciated.

I have the honour to be,

Your obedient servant,

(Signed.) M. GRABHAM,

Visiting Medical Officer.

DISEASES AND COMPLICATIONS AFFECTING

MOTHER.

Albuminuria	..	..	179
Abscess (Vaginal)	..	1	
Alastrim	..	7	
Acute Nephritis	..	2	
Accidental Haemorrhage	..	1	
Colitis	..	1	
Contracted Pelvis	..	2	
Dysentery	..	1	
Fever Ephemeral	..	4	
Fever, Malaria	..	1	
Haemorrhage Post Partum	..	11	
Haemorrhage Anti Partum	..	2	
Hydramnios	..	2	
Hour Glass Contraction	..	1	
Inertia	..	4	
Miscarriage	..	14	
Ophthalmia	..	2	
Polypus of Cervix	..	1	
Placenta Praevia	..	1	
Puerperal Convulsions	..	20	
Pellagra	..	1	
Prolapse Cord	..	1	
Prolapse of Cervix	..	1	
Puerperal Mania	..	1	
Rheumatism	..	2	
Tumours Uterine	..	4	
Typhoid	..	1	
Threatened Miscarriage	..	1	
Unrotated Shoulders	..	12	
Worms	..	2	

SYNOPSIS OF CASES.

Presentations—

Vertex	..	696
Unreduced Occipito Posterior	..	7
Footling	..	6
Breech	..	30
Transverse	..	6
Face	..	2

Operations—

Application of Forceps	..	6
Curetting	..	5
Dilation of Cervix	..	1
For Ruptured Perineum	..	55
For retained Placenta and Membranes	..	4
For adherent Placenta	..	4
Craniotomy	..	2
Version	..	18
Venesection	..	1
Intervenous Injection	..	1
Rigid Perineum	..	1

Diseases & Deformities affecting the Infant—

Convulsions	..	4
Extra Fingers	..	4
Hæmorrhagic Diatheses	..	2
Ophthalmia	..	17
Umbilical Hernia	..	1
Umbilical Haemorrhage	..	1
Alastrim	..	1
Cephalhaematoma	..	1
Hydrocephalus	..	1
Cleft Palate	..	1

Financial Return of the Victoria Jubilee Lying-in Hospital for the six years ended 31st March, 1916, 1917, 1918, 1919, 1920 and year ended 31st December, 1920.

Year.	Average daily No. of beds occupied.	Gross Expenditure.	Receipts.	Net Expenditure after deducting receipts.	No. of patients admitted.	Average annual cost per occupied bed calculated on the gross expenditure.	Cost of maintenance alone per occupied bed per diem.	Daily cost per occupied bed calculated on the gross expenditure.	Average annual cost per occupied bed calculated on the net expenditure.	Average daily cost per occupied bed calculated on the net expenditure.
1915-16	23	£ 1,199 12 10	465 2 6	734 10 4	517	52 3	2	0 0 0 10	2 10	31 18 8½
1916-17	25	1,218 5 6	577 15 0	640 10 6	594	48 14	7	0 0 0 9½	2 10	25 12 5
1917-18	25	1,340 11 9	529 19 0	810 15 9	593	53 12	7	0 1 0 2½	2 11½	32 8 7½
1918-19	27	1,572 4 6½	549 0 3	923 4 3½	680	58 4	9	0 1 3 2½	2 11½	34 3 10
1919-20	32	1,849 10 4½	656 10 5	1,192 19 11	800	57 9	9	0 1 3 2½	3 2	37 5 7
1920	34	2,345 15 9½	691 3 6	1,654 12 3	801	68 19 10½	0 1 6 3½	3 9	48 13 3½	2 0

Public Hospital, Kingston.
August, 1921.

Sir,

I have the honour to place before you the Annual Report and returns of the Medical and Surgical cases treated in this Hospital during the year ending March, 31st 1921.

Table 1. shows the number treated as Indoor Patients during the year, with results. The total number being 4,144, of which number, 282 were still in Hospital at the end of the year. The total number of deaths from all causes was 528; 296 males and 232 females.

The average number of beds occupied daily amounted to 285.35 (males 173.84 and females 101.51), as against 269.54 in the previous year.

Table 2. gives the average stay etc. of patients in hospital.

Table 3. gives the number of deaths occurring within 12-24-48-72, hours after admission. viz: 12 hours-38 24 hours-43. 48 hours-47. 72 hours-27.

The death rate from all causes for the year was 12.7% as compared with 9.51% of the previous year.

Table 4. gives the number of Medical cases treated during the year with results. The most noteworthy were:

- (1) Malaria—178 cases with 15 deaths as against 200 cases with 10 deaths in the previous year.
- (2) Enteric Fever—263 cases with 46 deaths as against 258 cases with 57 deaths in the previous year
- (3) Dysentery.—(amoebic) 49 cases with 14 deaths as against 19 cases with 5 deaths in the previous year.
- (4) Pulm. Tuberculosis—70 cases with 26 deaths as against 59 cases with 13 deaths in the previous year.
- (5) Syphilis—278 cases with 20 deaths as against 169 cases with 9 deaths in the previous year.
- (6) Gonorrhoea & Sequelae—270 cases with 3 deaths as against 258 cases without any deaths in the previous year.
- (7) Pneumonia.—176 cases with 53 deaths as against 186 cases with 26 deaths in the previous year.

Table 5 gives the number of major surgical operations performed during the year, viz: 1312 with 8 deaths as against 1,018 with 5 deaths in the previous year.

Table 6 & 7 give the returns of countries and parishes to which the various patients admitted during the year belonged.

Table 8. gives the occupations of patients admitted.

Table 9. shows the number of prescriptions dispensed for out-patients, constabulary, and maternity, Hospital, as also the number of minor surgical operations and out-patients treated.

The figures for the last four years compare as under:—

	1919-18	1918-19	1919-20	1920-21
Patients with tickets ..	1,772	1,204	797	1,601
Patients without Tickets ..	13,728	14,902	23,588	52,673
Minor operations ..	616	402	380	390
Out-patient dressings ..	41,236	42,523	48,725	49,621

It will be seen from the above that the work in the outpatient department has increased enormously. Table 10 gives the return of Venereal cases treated at the night clinics.

Lectures and classes for senior and junior nurses have been conducted regularly; 16 nurses passed the final examinations and were granted certificates.

The Board of Visitors have as usual visited regularly during the year.

Thanks to the kindness of Miss Douglass and a committee of the ladies the nurses were entertained to tea in the grounds of the Institution on Xmas day, an Xmas tree for the children being held at the same time. Our grateful thanks are due to all who subscribed to these functions.

I have also to thank those who, during the year have sent us books, magazines, flowers, etc.

In conclusion, I have to report that I have received valuable and loyal assistance from all who are associated with me in working the Hospital.

I have the honour to be,

Sir,
Your obedient Servant,

G. H. K. Ross,

Senior Medical Officer.

The Superintending Medical Officer
Kingston,

Chief Medical Officer & Director,
Sir,

I have the honour to submit the accompanying return of the work performed in the Dental Laboratory of this Hospital during the period ending December, 1920, and covering the previous 12 months.

The figures whilst shewing a slight decrease by comparison with the year 1919, owing probably to a little more independence on the part of the usual patrons, during a period of the year, nevertheless also shews the measure of relief which has been afforded the indigent public for the subvention provided.

1920—

No. of cases treated ..	..	..	2,321
No. of extractions of teeth ..	..	..	2,425
No. of mouth washes prescribed ..	..	..	73
No. of treatment of fractures of Jaw ..	..	..	1
No. of removal of necrosed process ..	..	..	2

I am, Sir,

Your obedient servant,
(Signed) S. C. DePass, D.D.S.

Summary of Financial Year, 1920-1921.

TABLE I.

		Males.	Females.	Total.
Patients remaining in hospital 1st April, 1920	..	186	103	294
Patients admitted during the year 1920-1921	..	2,369	1,481	3,850
Total patients treated		2,555	1,589	4,144
Of those were cured	..	1,348	1,041	2,389
Of those were relieved	..	428	334	762
Of those were not relieved	..	96	87	183
Of those died	..	296	232	528
Remaining in Hospital March 31st, 1921	..	185	97	282
		2,353	1,791	4,144
Death Rate		12.741%		

TABLE II.

Daily average number of beds occupied by Male patients	173.847
Daily average number of beds occupied by Female patients	101.51
Average stay in days of those who died, males	.. 13.37
Average stay in days of those who died, females	.. 12.413
Average stay in days of males discharged	.. 26.327
Average stay in days of females discharged	.. 29.43
Average stay in days of males remaining at end of the year	.. 23.413
Average stay in days of females remaining at the end of the year	.. 26.110
Longest stay of any one patient in hospital	.. 365 days

TABLE III.

Patients who have died within the following hours after admission.

		12	24	48	72	Hours.	Total.
Males	..	21	20	34	18		93
Females	..	17	23	13	9		62
		—	—	—	—		
		38	43	47	27		155
		—	—	—	—		

TABLE IV.—PUBLIC HOSPITAL, KINGSTON—MODEL

DISEASE.	April.		May.		June.		July.		August.		September.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Enteric Fever	25	4	13	3	27	5	26	3	23	7	21	4
Dysentery	2	1	3	1	9	2	4	..	2	1	1	1
Pneumonia	4	2	14	5	12	5	12	3	15	2	20	7
Influenza	2	..	3	..	5	..	..	..	1	..	2	..
Malarial Fever—												
Tertian	3	..	..	..	..	..	..	..	1	..	2	..
Sub-tertian	7	1	10	1	17	3	14	2	17	..	18	1
Quartian	..	..	..	..	..	..	..	..	..	..	..	..
Simple Fever	12	1	13	2	16	3	9	1	2	..	10	1
Tetanus	..	..	..	..	1	..	..	..	1	..	..	..
Pellagra	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..
Septicæmia	..	..	..	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis—												
Tertiary	6	2	6	3	11	4	8	3	2	1	6	2
Secondary	10	1	11	1	16	2	13	1	19	1	13	1
Congenital	4	..	2	..	3	..	8	..	5	1	10	1
Gonorrhœa and Sequela	1	..	4	..	1	..	..	..	2	..	..	..
Chancroid	29	..	22	..	26	1	20	..	18	..	26	..
Alcoholism	11	..	13	..	20	1	18	..	19	..	16	..
New Growth—	1	..	..	..	..	..	..	..	..	..	..	..
Malignant	..	..	..	..	..	..	..	..	..	..	..	..
Non-Malignant	1	..	2	..	3	..	1	..	5	..	8	1
Anæmia	4	..	11	..	7	1	3	..	5	..	..	..
Debility	..	..	..	..	3	..	1	..	2	..	1	..
Appendicitis	..	..	..	..	..	..	..	..	1	..	..	..
Whooping Cough	2	..	1	..	..	..	..	..	3	..	1	1
Beri-Beri	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..	2	..
Chicken Pox	..	..	..	..	..	..	..	..	5	..	19	..
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..
Mumps	..	..	..	..	..	..	..	..	..	..	..	..
Disease of the Brain	..	..	..	..	..	..	..	..	..	..	..	..
Disease of the Nerves	1	..	1	..	..	..	..	..	..	..	..	..
Disease of the Spinal Cord	4	..	4	..	2	1	..	..	5	2	1	..
Epilepsy	..	..	..	..	..	..	..	..	..	..	..	..
Paralysis	..	..	..	..	..	..	..	..	..	..	..	..
Hysteria	..	..	..	..	..	..	..	..	1	..	..	..
Mania	..	..	..	..	..	..	..	..	..	..	..	..
Dementia	..	..	..	..	..	..	..	..	..	..	..	..
Melancholia	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatism	..	..	..	..	..	..	..	..	..	..	..	..
Disease of the Eye	5	1	4	..	5	..	3	..	9	2	3	..
Disease of the Nose	8	..	5	..	3	..	5	..	3	..	4	..
Disease of the Ear	..	..	1	..	3	..	..	..	2	..	..	..
Circulatory System	17	3	16	5	14	6	13	4	18	7	14	4
Respiratory System	22	3	18	3	7	1	18	4	8	2	28	5
Digestive System	23	5	26	6	24	8	31	4	33	7	21	5
Lymphatic System	14	..	6	1	11	2	7	2	3	1	5	..
Urinary System	16	2	8	1	15	1	13	2	1	1	14	..
Male Generative Organs	12	2	15	3	13	1	8	1	14	1	18	2
Female Generative Organs	4	..	5	1	12	2	14	2	4	1	15	3
Cellular Tissue	10	1	7	1	15	3	17	2	9	2	5	1
Disease of the Skin	4	..	5	..	12	..	14	..	20	..	15	..
Disease of the Bones and Joints	8	2	6	1	3	..	8	2	2	1	6	1
Local Injuries	..	..	20	..	23	2	10	..	25	1	13	..
Malformation	15	1	..	..	..	..	..	..	..	..	..	..
Poisons	..	..	..	..	..	..	..	..	..	..	..	..
Parasites	..	..	..	..	..	..	..	..	..	..	..	..
Framboesia	7	..	..	1	..	..	..	..	..	..	..	..
Peritonitis	..	..	..	..	..	..	..	..	..	..	..	..
Jaundice	..	..	..	..	..	..	..	..	..	..	..	..
Leprosy	..	..	..	..	..	..	..	..	..	..	..	..
Vomiting Sickness	..	..	..	..	..	..	..	..	..	..	..	..
Dentition	..	..	..	..	..	..	..	..	..	..	..	..
Pregnancy	..	..	..	..	..	..	..	..	..	..	..	..
No. Disease	..	..	..	..	..	..	..	..	..	..	..	..
	289	34	283	38	340	54	320	42	282	42	328	45

REPORT—NOSOLOGICAL RETURNS, 1920-21.

October.		November.		December.		January.		February.		March.		Total.	
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
19	3	20	4	18	3	21	4	24	3	26	3	263	46
2	1	9	1	4	1	3	2	2	1	8	4	49	14
18	3	14	6	19	7	11	5	15	7	12	1	176	53
..	..	2	1	..	..	2	..	1	..	3	..	21	..
17	..	2	2	11	1	13	1	10	1	19	2	170	15
11	1	5	1	4	1	5	1	11	2	8	1	106	14
1	..	..	..	..	..	..	..	..	..	..	..	4	..
..
4	1	9	3	3	1	10	4	..	..	5	2	20	4
25	2	13	..	17	1	9	1	15	..	10	2	171	13
4	..	5	3	..	..	8	..	12	..	3	..	67	4
2	..	7	1	11	..	3	1	..	..	1	..	40	3
14	1	24	..	15	..	30	..	28	..	2	..	13	..
17	..	15	..	14	..	16	1	14	..	18	1	270	3
..	..	..	..	..	..	..	..	..	..	15	..	188	2
1	..	4	..	3	1	2	..	..	..	..	..	1	..
12	..	7	1	8	..	12	1	6	..	5	..	33	2
..	..	1	..	..	..	2	1	..	..	4	..	87	4
2	..	3	1	..	..	1	..	1	..	1	..	10	1
..	..	..	..	..	..	..	..	..	..	..	..	6	1
1	..	..	..	1	..	6	..	4	..	..	..	14	2
6	..	7	..	3	..	3	..	..	..	..	..	..	..
..	..	4	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	4	2	..	..	..	..	..	..	..	..
14	2	9	1	4	..	1	..	..	..	..	..	22	8
1	..	..	..	1	..	..	..	..	..	..	..	61	6
1	..	..	..	..	..	..	..	..	..	..	..	1	..
1	..	..	..	..	..	..	..	..	..	..	..	7	1
2	..	..	..	..	..	..	..	..	..	..	..	6	1
..	..	..	..	..	..	..	..	..	..	..	..	4	..
1	..	..	..	..	..	..	..	..	..	..	..	4	..
2	..	4	1	..	..	..	..	..	..	..	..	3	..
7	..	5	..	2	..	..	..	..	..	..	..	42	8
1	..	..	..	1	..	..	..	..	..	..	..	47	..
1	..	..	..	..	..	..	..	..	..	..	..	8	..
20	5	19	3	13	7	18	8	20	5	14	6	196	63
16	..	25	5	15	4	7	1	19	1	20	2	203	35
29	6	18	7	24	8	19	9	25	5	28	7	301	77
9	1	13	1	7	1	10	1	2	..	14	2	91	12
11	1	16	1	9	..	5	..	6	1	9	1	129	13
9	1	17	1	11	..	5	..	9	2	13	1	144	14
13	..	7	1	8	2	7	2	8	1	10	2	107	17
8	1	1	2	6	..	6	1	10	2	15	1	123	17
14	..	8	..	7	..	2	..	10	..	4	..	94	..
2	..	3	1	4	..	5	1	3	..	5	..	55	11
15	..	22	1	31	2	14	..	20	1	18	..	226	8
..
1	..	..	..	..	..	..	..	..	..	..	..	4	..
6	..	8	..	4	..	3	..	6	..	6	..	56	..
..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	..	..	..	8	..
..	..	..	..	..	..	..	..	..	..	..	..	4	..
2	..	2	..	1	..	4	..	..	..	..	..	14	..
..	..	1	..	..	..	..	..	..	..	..	..	16	..

TABLE V.—PUBLIC HOSPITAL, KINGSTON—MODEL.

DISEASE.	April.		May.		June.		July.		August.		September.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Abscesses—Incisions of	8	..	12	..	7	..	4	..	3	..	2	..
Abdominal Section for—												
Appendectomy	..	..	..	..	..	..	..	..	..	..	..	..
Ovariectomy	1	..	..	..	..	..	1	..	..	..	1	..
Ophorectomy (Double)	..	..	..	..	..	..	..	..	..	..	..	..
Gastro Jjunostomy	..	..	..	..	..	..	..	..	..	..	..	..
Pyosalpinx	..	..	..	..	..	..	..	..	..	..	..	..
Exploratory Laparotomy	..	..	..	..	..	..	..	..	..	..	..	..
Intestinal Obstruction	1	1	..	..	1	1	..	..	..	..	..	..
Hysterectomy	..	..	2	..	1	2	..	1	..	..	2	..
Cholecystotomy	..	..	..	..	..	1	..	..	..	..	..	..
Amputations—												
Leg	..	..	..	..	1	..	1	1	..	..	..	..
Hand	..	..	..	..	..	..	1	..	..	..	1	..
Breast	..	..	..	..	1	..	..	..	..	..	..	..
Penis	..	..	..	..	..	..	..	..	..	..	..	..
Finger	..	1	..	..	..	..	..	1	..	..	..	..
Toe	..	..	..	1	..	..	..	1	..	..	1	..
Foot	..	..	..	..	..	1	..	..	..	..	..	..
Bones—Resectotomy	..	..	..	1	..	..	..	..	..	..	..	1
Bladder and Urethra—												
Dilation of Stricture	2	..	4	..	3	..	2	..	..	..	3	..
Perineal Section	..	..	1	..	..	..	..	..	..	..	..	..
Suprapubic Cystotomy	..	..	..	..	..	..	..	..	..	..	..	..
Prostatectom (Fregers)	..	..	..	..	..	..	..	..	..	..	..	..
Eye on—												
Enucleation of	1	..	..	..	..	..	..	..	..	..	..	2
Extraction of Cataract with Iredectomy	..	..	..	..	..	..	..	..	..	..	..	..
Extraction of Cataract without Iredectomy	..	..	..	..	..	..	..	..	..	..	..	..
Needling Cataract	..	..	..	..	..	..	..	..	..	..	..	..
Removal of Pterygium	..	..	..	..	..	..	1	..	..	..	..	..
Face Nose and mouth—												
Nasal Polypus	..	1	..	..	..	1	..	..	..	..	..	..
Tonsils	..	5	..	3	..	2	..	3	..	..	6	..
Adenoids	..	4	..	2	..	3	..	2	..	..	3	..
Glands, Removal of—												
Inguinal	..	6	..	3	..	4	..	10	..	..	7	..
Cervical	..	1	..	..	..	1	..	..	..	..	..	..
Sub-maxillary	..	..	..	..	..	..	..	..	..	..	..	..
Axillary	..	..	..	..	..	..	..	..	..	..	..	..
Scraping of—												
Inguinal	..	..	..	..	..	..	..	1	..	..	..	..
Cervical	..	..	..	..	..	..	..	..	..	..	..	..
Hernia—												
Radical cure for	1	..	..	..	..	1	..	..	..	..	1	..
Herniotomy for Strangulated hernia	3	..	2	..	2	..	3	1	6	1	4	..
Male Generative Organs—												
Radical cure for hydrocele	..	1	..	1	..	..	1	..	2	..	1	..
Radical cure for Varicocele	..	..	..	..	..	..	1	..	..	..	..	..
Circumcision	..	22	..	12	..	18	..	20	..	14	..	19
Cauterising of Chancroids	..	1	..	2	..	..	1	..	..	..	..	1
Unilateral Orchestomy	..	..	..	..	..	1	..	..	..	..	..	..
Female Generative Organs—												
Curetting	..	3	..	4	..	2	..	4	..	5	..	6
Recto Vaginal Fistula	..	..	..	..	..	1	..	1	..	..	..	..
Cauterising Urethral Carbuncle	..	..	..	..	..	..	..	1	..	..	..	..
Amputation of Ceruix Uteria	..	..	..	..	..	1	..	..	..	1	..	..
Ventral Fixation	..	..	..	..	..	..	..	..	..	..	..	..
Trachelorrhaphy	..	..	..	..	..	1	..	..	..	..	..	..
Rectum and Anus—												
Dilating Rectal Stricture	..	2	..	..	..	1	..	1	..	..	1	..
Haemorrhoids	..	1	..	3	..	1	..	1	..	..	1	..
Fistula in Ano	..	..	..	..	..	1	..	..	..	..	..	..
Removal of Toe-nails	..	2	..	1	..	2	..	1	..	..	3	..
Trephining for compound depressed fracture of skull	..	..	..	..	..	..	..	1	..	..	..	..

REPORT—NOSOLOGICAL RETURNS, 1920-21.

DISEASES.	April.		May.		June.		July.		August.		September.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Tumours and Cysts—												
Prepatella Bursa ..	1	..	..	..	..	..	1	..	..	..	..	..
Melbonian Cyst ..	..	..	..	..	..	..	1	..	..	..	..	..
Lipoma ..	1	..	..	..	..	..	..	..	1	..	..	..
Fibroma ..	..	..	..	..	..	..	..	..	..	..	..	..
Cystic Tumours ..	..	..	..	..	..	1	..	..	..	..	..	..
Gangrene ..	..	..	..	..	..	..	1	..	..	..	..	..
Sebaceous Cyst ..	..	..	..	..	..	..	..	..	1	..	..	..
Miscellaneous—												
Examination ..	2	..	3	..	1	..	..	..	4	..	..	3
Scraping Chronic Ulcers ..	1	..	4	..	2	..	..	..	2	..	..	..
Scraping Sinuses ..	..	..	..	..	1	..	..	..	1	..	..	..
Ligaturing Varicose Veins ..	..	..	1	..	..	..	..	..	..	..	..	..
Excision of Carbuncle ..	1	..	..	..	..	..	..	1	..	..	..	..
Erosion of Knee-joint ..	..	..	..	..	1	..	..	..	..	..	..	1
Extraction of Bullet ..	1	..	..	..	..	..	..	..	..	..	..	..
Removal of Warts ..	..	..	..	..	..	..	1	..	..	..	..	..
Explanatory Incisions ..	..	..	..	..	..	..	..	..	..	..	..	..
Ligaturing Arteries ..	..	..	..	..	1	..	..	..	..	..	..	1
Luturing Tendons ..	1	..	..	..	..	..	1	..	..	..	..	..
Minor Operations performed without Chloroform:—												
Incisions of Abscesses ..	31	..	15	..	25	..	8	..	17	..	..	14
Removal of Foreign bodies ..	3	..	2	..	5	..	2	..	1	..	..	..
Dilation of Stricture ..	14	..	9	..	7	..	3	..	14	..	..	6
Tapping Hydrocele ..	1	..	..	..	1	..	1	..	..	..	..	2
Removal of Tonsils ..	3	..	..	..	8	..	4	..	..	..	..	..
Reducing dislocations ..	1	..	..	..	2	..	1	..	..	..	..	..
Removal of Pteygium ..	..	..	1	..	..	..	..	..	..	..	..	..
Removal of Finger Nails ..	2	..	1	..	..	..	3	..	1	..	..	..
Scraping Adenoids ..	3	..	4	..	1	..	4	..	5	..	..	1
Setting Fractures ..	2	..	1	..	3	..	2	..	5	..	..	..
	136	..	97	..	122	..	98	..	134	..	97	..

RETURNS, 1920-21. *contd.*

October.		November.		December.		January.		February.		March.		Total.	
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	..	2	1	1	..	..	..	..	..	..	..	..	..
1
1
..
10	..	13	23	16	15	18	18	..	..	..	..	205	..
3	..	4	2	3	4	7	..	..	..	..	..	36	..
3	..	12	8	7	13	10	..	..	..	..	..	106	..
1	..	1	1	6	1	..	..	..	..	..	..	8	..
2	1	2	..	..	..	..	..	..	41	..
..	2	..
1	..	2	2	1	4	1	..	..	..	..	..	10	..
2	..	1	..	1	2	2	..	..	..	..	..	29	..
..	21	..
136	..	92	..	114	..	111	..	107	..	117	..	1,312	8

TABLE VI.

Countries.	No.
Africa	1
America	9
Antigua	2
Arabia	1
Barbados	4
Bocas-del-Toro	1
Canada	1
China	13
Cayman Brac	4
Cuba	1
Cyprus	1
Denmark	2
England	37
Germany	2
Grenada	2
British Honduras	2
Spanish Honduras	1
India	37
Ireland	5
Italy	1
Jamaica	3,696
Mexico	2
Nassau	1
New Zealand	1
Nicaragua	1
Norway	2
Scotland	8
Sweden	3
St. Lucia	1
St. Thomas	1
St. Vincent	5
Syria	1
Turks Island	26
Trinidad	101

TABLE VII.

Parish.	No.
Kingston	2,554
Port Royal	21
St. Andrew	1,096
St. Thomas	10
Portland	8
St. Mary	11
St. Ann	4
Trelawny	2
St. James	4
Westmoreland	1
St. Elizabeth	5
Manchester	1
Clarendon	6
St. Catherine	26
Foreign	101

TABLE VIII.

Occupation.	No.
Apiarists	2
Accountants	1
Auctioneers	1
Apprentices	26
Attendants	5
Bakers	26
Barbers	1
Barmaids	3
Bacteriologist (Asst.)	1
Bellboys	2
Blacksmiths	9
Boatmen	2
Bookbinders	2
Bookkeepers	1
Brakesmen	12
Bricklayers	6
Busmen	27
Builders	1
Butchers	6
Butleresses	17
Butlers	2
Brewers	2
Cabinet-makers	8
Cartmen	19
Carpenters	75
Chaussieurs	27
Cigarmakers	15
Clergymen	2
Clerks	53
Coachmen	5
Cooks	46
Conductors	7
Contractors	1
Constables	278
Coopers	4
Cultivators	2
Dentists	1
Distillers	1
Draymen	5
Electricians	2
Engineers	9
Engine-drivers	3
Firemen	53
Fishermen	38
Fitters	11
Foremen	1
Gardeners	46
Goldsmiths	5
Gentlewomen	7
Grooms	7
Higgliers	110
Hatmakers	26
Housekeepers	2
Jewellers	1
Jockeys	7
Labourers	756
Laundresses	161
Machinists	4
Matrons	1
Masons	12
Mechanics	40
Merchants	1
Messengers	27
Messmen	2
Midwife	1
Moulders	2
Motormen	3
Musicians	3

TABLE VIII., *contd.*

Occupation.	No.	Occupations	No.
None ..	723	Shipwrights ..	2
Nurses ..	57	Shoemakers ..	34
Overseers ..	1	Shopkeepers ..	27
Planters ..	22	Stewards ..	8
Packers ..	1	Storemen ..	17
Peddlars ..	11	Stevedores ..	2
Penkeepers ..	1	Students ..	7
Pilots ..	1	Supts. of Roads ..	1
Photographers ..	1	Songsters ..	1
Planters ..	61	Switchmen ..	4
Plumbers ..	2	Tailors ..	34
Porters ..	6	Teachers ..	5
Postmen ..	3	Tinsmiths ..	2
Printers ..	1	Telephone Operators ..	1
Produce Dealers ..	1	Tobacconists ..	1
Renovators ..	1	Typists ..	7
Sailors ..	17	Upholsterers ..	2
Sawyers ..	1	Vendors ..	3
Sanitary Inspectors ..	3	Waiters ..	2
Servants ..	554	Watchmen ..	6
Seamen ..	37	Warden ..	1
Seamstresses ..	125		
			3,850

TABLE IX.

No. of Out-patients treated with tickets from Authorized Persons	1,601
No. of prescriptions for above ..	11,271
No. of casual patients treated without tickets ..	52,678
No. of prescriptions for above ..	18,277
No. of prescriptions made up for Constabulary ..	782
No. of Minor Surgical operations performed in Surgery ..	290
No. of Outpatients dressings applied ..	49,621

TABLE X.

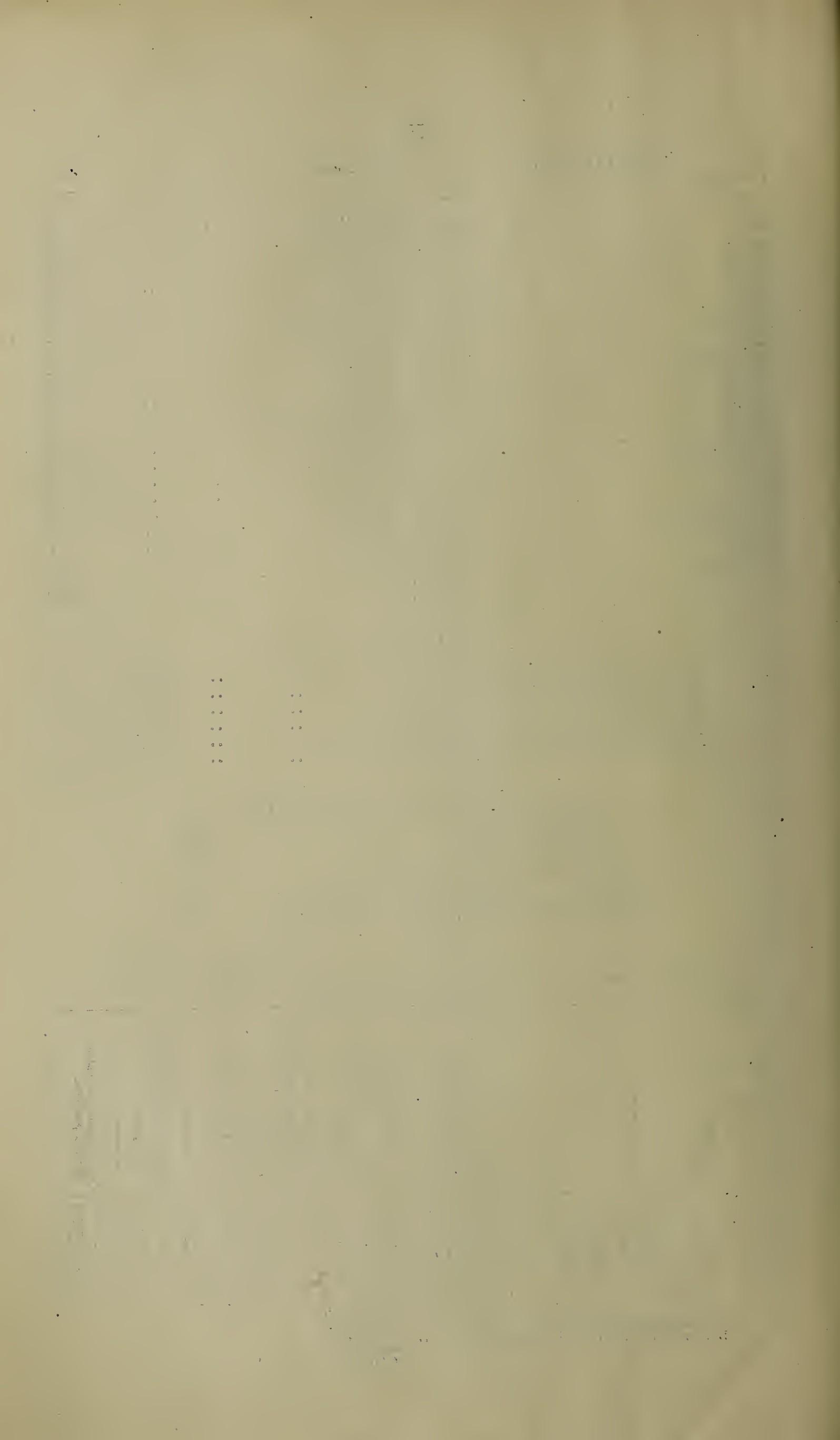
Results of Evening Clinics for year ending 31.8.21.

Total number of Patients ..	780
" attendance of patients ..	2,557
" amount of prescriptions ..	2,557
" amount of arsenical injections to out door patients ..	679
Daily average of men attending for dressings at nights ..	30
Daily average of women attending at nights for treatment ..	15

J. A. BARNES. 28.7.21.

Financial Return of the Public Hospital for the six years ended 31st March 1916, 1917, 1918, 1919, 1920 and year ended 31st December, 1920.

Year.	Average daily no of beds occupied.	Gross Expenditure.	Receipts.	Net expenditure after deducting receipts.	No. of patients admitted.	Average annual cost per bed calculated on the gross expenditure.	Daily cost per occupied bed calculated on the gross expenditure.	Average annual cost per occupied bed calculated on the net expenditure.	Average daily cost per occupied bed calculated on the net expenditure.	Cost of maintenance alone per bed per diem.
1915-16 ..	102	£ 10,417 s. 4 d. 9	£ 862 s. 9 d. 6	£ 9,554 s. 15 d. 3	3,072	£ 54 s. 2	£ 2 s. 11 d. 3	£ 49 s. 15 d. 3	£ 2 s. 8 d. 3	s. d. 0 10
1916-17 ..	236	11,989 s. 2 d. 10	1,327 s. 13 d. 1	10,661 s. 9 d. 9	3,983	43 s. 3	2 s. 4 d. 4	39 s. 6 d. 2	2 s. 2 d. 1	0 10
1917-18 ..	262	13,542 s. 10 d. 10	1,585 s. 10 d. 4	11,957 s. 0 d. 6	3,689	51 s. 13 d. 9	2 s. 10	45 s. 12 d. 9	2 s. 6 d. 6	1 2
1918-19 ..	277	15,499 s. 2 d. 3	925 s. 0 d. 10	14,574 s. 1 d. 5	3,532	55 s. 19 d. 1	3 s. 0 d. 2	52 s. 12 d. 3	2 s. 10 d. 2	1 4
1919-20*	284	18,464 s. 17 d. 5	753 s. 16 d. 1	17,711 s. 1 d. 4	3,712	65 s. 0 d. 4	3 s. 6 d. 4	62 s. 14 d. 4	3 s. 5 d. 4	1 6
1920 ..	293	24,465 s. 0 d. 4	750 s. 2 d. 0	23,714 s. 18 d. 4	3,753	83 s. 10 d. 0	4 s. 6 d. 4	80 s. 5 d. 1	4 s. 4 d. 2	1 11
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										
<hr/>										



LUNATIC ASYLUM.

REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1920.

Island Medical Office, Kingston,
31st October, 1921.

Sir,

I have to forward the Annual Report on the working of the Lunatic Asylum for the year ended 31.12.20.

I have the honour to be,

Sir,

Your obedient Servant,

E. L. HUNT,

Superintending Medical Officer.

The Honourable

The Colonial Secretary,

Kingston.

Lunatic Asylum—Report for the year ended 31st December, 1920.

Sir,

I have the honour to submit the Annual Report of the Jamaica Lunatic Asylum for the year ended December 31st, 1920.

2. The number of patients remaining in the Asylum on December the 31st, 1919, was 1,383, of whom 700 were males and 683 females.

3. The total number of patients under treatment was 1,747 with a daily average of 1,314.60.

4. The admissions for the year numbered 364, of whom 195 were males and 169 were females. Although the daily average number of patients is annually increasing the medical staff has remained the same for the last quarter of a century, viz:—

One Medical Superintendent with two Assistant Medical Officers and a Dispenser. It is presumed that when all the rivers of Jamaica are bridged, all the roads repaired, the railway electrified and extended to every parish, the asylum buildings will be restored and the medical staff augmented.

5. The number of patients discharged during the 12 months amounted to 134, of whom 66 were males and 68 females; 126 were discharged recovered, 7 relieved and 1 escaped. These figures shew a recovery rate of 34.98 per cent.

6. During the year 412 patients died, of whom 214 were males and 198 females. This exceptionally high mortality is equal to 31.33 of the daily number under care and can be attributed to several causes, viz:—

- (a) The admission of unfavourable class of patients, some of whom were moribund on arrival, others owing to age and infirmity should have been allowed to die in peace in the local poor-house instead of being forced to undergo a long railway journey to hasten the end in the Asylum.
- (b) In common with the rest of Jamaica, the asylum suffered in the autumn of 1918 from the epidemic of Spanish Influenza and a large percentage of the inmates who suffered from primary pneumonia have since succumbed to pulmonary tuberculosis; 93 patients died from this disease during the twelve months.
- (c) During the summer months an outbreak of dysentery occurred in the male wards which taxed our infirmary accommodation to the utmost, and although prompt and active measures were taken for its eradication it claimed 50 victims.
- (d) Pellagra, a disease of malnutrition, claimed 25 victims. As pointed out in last year's report, this disease cannot be eradicated from our wards as long as beef contractors are permitted to substitute Chuck Steak and Navel Stew at 1/2d. per pound for boneless beef of the best description.

7. As the following population return shews, there remained on the 31st December, 1920, 615 men and 586 women or a total of 1201 inmates:—

Year 1920.

	Males.	Females.	Total.	Males.	Females.	Total.
Remaining 31st December, 1919	700	683	1,383
Admitted during year 1920	194	168	362			
Born during year 1920	..	1	1			
Captured during year 1920	..	1	..	195	169	364
Total under care year 1920	895	852	1,747
Discharged—recovered	..	63	63	126	..	..
Discharged—relieved	..	2	5	7	..	..
Discharged—not improved
Escaped	..	1	..	1	..	..
Patients died	..	214	198	412	..	..
Total discharged and died	280	266	546
Remaining 31st December, 1920	615	586	1,201

8. Amusements for the patients continue unchanged: cricket; sea-bathing for suitable cases and concerts form our most important methods of entertainment. Many friends and clubs interested in the welfare of the inmates favour us with a supply of magazines and illustrated papers, doubtless others would assist us with discarded books and papers if they realized the amount of pleasure and mental relief afforded the patients by their perusal.

9. The existing buildings have been kept in good state of repairs by the Public Works Department, but we are still waiting for the restoration of the Ward which was handed over to the Department in 1914.

10. The following Officers were granted vacation leave during the year (1) Medical Superintendent—granted six weeks; (2) Dr. H. E. Bond, Second Assistant Medical Officer, granted six months; (3) Mrs. Hogg the Storekeeper, granted three months leave. Dr. Lyon was appointed to perform the duties of the Second Assistant Medical Officer during Dr. Bond's absence.

11. Rainfall for the 12 months was 11.84 inches, probably one of the smallest falls on record. No rain fell in April, June and December.

12. The sum voted on the Estimates for the maintenance of the Lunatic Asylum, including a Special Warrant for £3,500, was £47,090: the sum expended was £48,997.

I have the honour to be,

Sir,

Your obedient Servant,

D. J. WILLIAMS,
Medical Superintendent.
28th October, 1921.

The Honourable,
The Superintending Medical Officer,
Kingston.

TABLE I. Shewing the actual admissions, re-admissions, discharges and deaths during the calendar year ended 31st December, 1920.

	Males.	Females.	Total.	Males.	Females.	Total.
In Asylum 1st January, 1920	..	..	..	700	683	1,383
Cases admitted—						
First admissions	165	131	296			
Not first admissions	29	37	66			
Captured	1	..	1			
Birth	..	1	1			
Total cases admitted during the year	..	..	..	195	169	364
Total cases under care during the year	..	..	..	895	852	1,747
Cases discharged—						
Recovered	63	63	126			
Relieved	2	5	7			
Not improved	..	..	..
Escaped	1	..	1			
Died	214	198	412			
Infants	..	..	..
Infants discharged	..	..	..
Total discharged and died during the year	..	..	..	280	266	546
Remaining in Asylum 31st December, 1920	..	..	..	615	586	1,201
Average number resident during the year	..	..	..	670	644	1,314
Persons under care during the year (<i>i.e.</i> , separate persons in contradistinction to cases which may include the same individual more than once)				892	851	1,743
Persons admitted do do ..	..	..	..	191	167	358
Persons recovered do do ..	..	..	..	62	63	125

Table Ia.—Shewing the number of previous attacks among those admitted during the Calendar year, 1920, distinguishing those attacks that have been treated to recovery and discharged.

Number of previous attacks.	Having had previous attacks.					
	All attacks.			Attacks followed by discharge or recovery.		
	Males.	Females.	Total.	Males.	Females.	Total.
Have had 1 previous attack	21	29	60	1	19	11
Have had 2 previous attacks	11	16	27	3	2	5
Have had 3 previous attacks	6	4	10	3	2	5
Have had 4 previous attacks	2	1	3	..	1	1
Have had more than 5 attacks	1	1	2	..	..	..
Unknown	..	5	5	..	2	2
	41	66	107	7	17	24

Table II.—Shewing the admissions, re-admissions, discharges and deaths for the past twenty-three years and 9 months ended 31st December, 1920.

	Males.	Females.	Total.	Males.	Females.	Total.
Remaining on 31st March, 1897 ..	..	..	..	345	377	722
Admitted during the last twenty-three years and 9 months ..	2,782	2,545	5,327			
Re-admissions	532	485	1,017			
Infants born	1	7	8			
Total number of admissions .. .. ..	..	..	..	3,315	3,037	6,352
Total number under care .. .. ..	..	..	..	3,660	3,414	7,074
Discharged cases—						
Recovered ..	1,525	1,364	2,889			
Relieved ..	47	27	74			
Not improved ..	27	14	41			
Died ..	1,441	1,415	2,856			
Escaped and not captured ..	4	1	5			
Infants discharged ..	..	6	..			
Infants died ..	1	1	2			
Total discharged and died .. .. ..	..	..	..	3,045	2,828	5,873
Remaining 31st December, 1920 ..	..	..	..	615	586	1,201
Average yearly number resident .. .. ..	..	..	..	559	565	1,125

TABLE III.—Shewing the Admissions, Discharges and deaths, with the mean Annual Mortality, and the proportion of recoveries per cent. of the Admissions for each of the last twenty-three years, and nine months to 31st December 1920.

TABLE IV.—Shewing the history of the annual admissions for the past twenty-three years and nine months, with the discharges and deaths, and the numbers of each year remaining on 31st December, 1921.

TABLE V.—Shewing the causes of Deaths during the Calendar year 1920, with the ages at death.

TABLE V.—Shewing the causes of death during the Calendar year 1920, with the ages at death.

Table VI.—Showing the length of residence in those discharged recovered and in those who have died during the calendar year 1920.

Length of Residence.	Recovered.			Died.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 month ..	1	1	2	8	5	13
From 1 to 3 months ..	10	8	18	9	6	15
From 3 to 6 months ..	17	27	44	16	9	25
From 6 to 9 months ..	13	8	21	5	9	14
From 9 to 12 months ..	8	5	13	6	5	11
From 1 to 2 years ..	9	10	19	29	14	43
From 2 to 3 years ..	2	3	5	12	16	28
From 3 to 5 "	2	1	3	22	17	39
From 5 to 7 "	1	..	1	23	20	43
From 7 to 10 "	..	..	..	21	21	42
From 10 to 12 "	..	..	..	11	7	18
From 12 to 15 "	..	..	..	7	9	16
From 15 to 20 "	..	..	..	13	24	37
From 20 to 25 "	..	..	..	17	14	31
From 25 to 30 "	..	..	..	8	8	16
From 30 to 35 "	..	..	..	4	8	12
From 35 to 40 ..	..	..	..	2	3	5
Upwards of 40 "	..	..	..	1	3	4
	63	63	126	214	198	412

Table VII.—Showing the duration of the disorder on admission in the admissions, discharges and deaths during the calendar year ended 31st December, 1920.

CLASS.	Admissions.			Discharges.			Deaths.					
				Recovered.								
	M.	F.	T.	M.	F.	T.	M.	F.	T.			
First Class—First attack, and within 3 months on admission ..	119	90	200	43	32	75	2	2	4	110	86	196
Second Class—First attack, above 3 and within 12 months on admission ..	22	10	32	5	3	8	..	..	..	29	28	57
Third Class—Not first attack, and within 12 months on admission ..	40	47	87	12	23	35	..	2	2	27	26	53
Fourth Class—First attack or not, but of more than 12 months on admission ..	17	21	38	2	4	6	..	1	1	23	30	53
Fifth Class—Congenital ..	1	..	1	..	..	..	..	..	..	2	..	2
Unknown ..	5	..	5	1	1	2	..	..	..	23	28	51
Total ..	194	168	362	63	63	126	2	5	7	214	198	412

Table VIII.—Shewing in quinquennial period the ages of those admitted, recovered and died during the calendar year 1920, and those remaining on 31st December, 1920.

Ages.	Admissions.			Recoveries.			Deaths.			Patients			
										Resident 31st December, 1920.			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
From 5 to 10 yrs.	1	Inft.	1
" 10 to 15 "	1	3	4	1	1	2	..	..	..	1	2	3
" 15 to 20 "	23	9	32	6	4	10	..	1	1	24	6	30	
" 20 to 25 "	30	36	66	17	16	33	10	6	16	41	40	81	
" 25 to 30 "	32	27	59	14	11	25	37	13	50	76	59	135	
" 30 to 35 "	31	26	57	7	7	14	28	24	52	80	71	151	
" 35 to 40 "	23	20	43	6	7	13	33	27	60	77	76	153	
" 40 to 45 "	19	11	30	6	5	11	27	25	52	80	86	166	
" 45 to 50 "	15	17	32	1	6	7	17	31	48	75	82	157	
" 50 to 55 "	9	9	18	3	4	7	18	21	39	63	52	115	
" 55 to 60 "	1	1	2	2	..	2	6	11	17	40	41	81	
" 60 to 65 "	4	6	10	..	1	1	20	16	36	21	29	50	
" 65 to 70 "	2	2	4	..	..	..	10	7	17	21	22	43
" 70 to 75 "	3	1	4	..	1	1	3	7	10	10	12	22	
" 75 to 80 "	1	..	1	..	..	..	3	5	8	3	5	8
" 80 to 85 "	..	..	..	..	..	..	2	3	5	3	1	4
" 85 to 90 "	..	..	..	..	..	..	..	1	1	..	1	1
" 90 to 95 "	..	..	..	..	..	..	..	..	..	..	..	..
Unknown	..	..	..	..	..	..	..	..	..	..	..	..
Totals	194	168	362	63	63	126	214	198	412	615	586	1,201	
Mean Age	32.91	33.22	33.86	29.49	32.47	30.98	42.20	46.29	44.24	40.73	42.40	41.56	

Table IX.—Shewing the condition as to Marriage in the Admissions, Recoveries and Deaths during the calendar year ended 31st December, 1920.

Condition in Reference to Marriage.	Admissions.			Recoveries.			Deaths.				
	M.	F.	T.	M.	F.	T.	M.	F.	T.		
Single	145	108	253	47	43	90	164	129	293
Married	39	49	88	10	16	26	39	50	89
Widowed	5	10	15	2	4	6	8	13	21
Unknown	5	1	6	4	..	4	3	6	9
Divorced
Total	194	168	362	63	63	126	214	198	412

Table X.—Showing the probable causes of insanity in the patients admitted during the calendar year ended 31st December, 1920.

Cause of Insanity.	Number of instances in which each cause was assigned.												
	Number of cases Admissions—Males, 194; Females, 168; total 362.												
	As pre-disposing cause..			As exciting cause.			As predisposing or exciting where these could not be distinguished.			Grand Total.			
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Moral—													
Domestic trouble (including loss of relatives and friends)	1	..	1	..	..	..	1	..	1	
Adverse circumstances (including business anxieties and pecuniary difficulties)	1	..	1	2	..	2	..	..	..	3	..	3
Mental anxiety and worry (not included under above two heads) and over work	2	2	..	..	..	..	2	2	
Religious excitement	..	4	..	4	4	10	14	..	..	8	10	18
Love affairs (including seduction)	1	1	2	..	..	..	1	1	2	
Physical—													
Intemperance in drink	3	2	..	2	..	..	..	5	..	5	
Ganga-smoking	1	..	1	..	..	..	1	..	1	
Accident or injury	
Puberty	4	4	..	..	..	..	..	4	..	4	
Fever (Malarial)	2	1	3	..	..	2	1	3	
Other bodily disease	5	..	5	1	..	1	..	6	..	6	
Previous attacks	41	38	79	..	..	..	..	41	38	79	
Hereditary influence	65	47	111	..	..	..	..	65	47	111	
Adolescence	5	5	..	..	..	..	..	5	5	
Epilepsy	5	..	5	11	5	16	16	5	21
Puerperal	7	7	..	..	7	7	
Tubercular disease	1	..	1	1	4	5	2	4	6
Syphilis	2	4	6	2	4	6
Not known	166	33	199	166	33	199
Traumatism	1	2	3	1	2	3
Senility	7	1	8	7	1	8
Pregnancy	1	1	1	1
Typhoid Fever	1	1	1	1
Influenza	1	1	1	1
Vagrancy	1	1	1	1
Arterial Sclerosis	1	..	1	1	..	1
Fever	3	3	3	3
Headaches	1	1	1	1

TABLE XI.—Shewing the form of mental disorder in the Admissions Recoveries and Deaths during the calendar year and the form of mental disorder of the inmates on 31st December, 1920.

Form of Mental Disorder.	Admissions.			Recoveries.			Deaths.			Remaining in Asylum		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Congenital or Infantile mental deficiency—												
(a) with Epilepsy ..	1	..	1	..	..	..	..	1	2	1	..	1
(b) without Epilepsy ..	1	..	1	..	..	..	1	1	2	2	3	5
Epilepsy—Acquired ..	14	7	21	1	1	2	22	7	29	36	27	63
General Paralysis of the Insane ..	..	..	..	..	..	..	2	..	2	1	..	1
Mania—												
Acute ..	64	82	146	35	29	54	82	123	205	61	170	231
Chronic ..	20	7	27	..	..	..	36	11	47	213	176	389
Recurrent ..	34	47	81	13	27	40	25	15	40	99	68	167
a Potu ..	..	..	..	..	..	..	..	..	..	..	12	12
Puerperal ..	..	..	..	7	7	..	3	3	..	..	..	..
Senile ..	..	..	..	3	4	7	..	..	1	4	5	2
Melancholia—												
Acute ..	17	2	19	5	2	7	8	5	13	6	1	7
Chronic ..	4	..	4	..	..	..	2	1	3	3	..	3
Recurrent ..	2	2	4	1	..	..	1	1	3	4	..	..
Puerperal ..	..	..	..	1	1	..	1	1	..	..	..	..
Senile ..	..	..	..	..	..	..	..	..	..	..	..	..
Dementia—												
Primary ..	22	7	29	8	..	8	7	5	12	10	18	28
Secondary ..	3	1	4	..	..	..	19	17	36	177	103	280
Senile ..	9	1	10	..	..	..	7	2	9	4	..	4
Organic (<i>i.e.</i> , from tumours, coarse brain lesions, etc.) ..	..	..	..	..	..	..	..	..	..	..	..	..
Infant (born in Asylum.) ..	..	..	..	..	..	..	..	..	..	..	1	1
	194	168	362	63	63	126	214	198	412	615	586	1201

TABLE XII.—Showing the previous occupations of patients admitted during the calendar year 1920

Occupation.	Males.		No.
	No.	Occupation.	
Labourers ..	105	Clerks ..	..
Carpenters ..	7	Cultivators ..	..
Shopkeepers ..	2	Not known ..	..
Tailors ..	3	Baker ..	..
Masons ..	2	Preacher ..	..
Contingent Soldiers ..	7	Land Surveyor ..	..
Fisherman ..	1	Engineer ..	..
Butcher ..	1	Sailors ..	..
Shoemakers ..	4	Mechanic ..	..
Blacksmiths ..	2	Contractor ..	..
Saddler ..	1	Pauper ..	..
Gardener ..	1	Agriculturist ..	..
Dispensers ..	2	Higgler ..	..
Waiter ..	1	Tobacco-sellers ..	..
Drayman ..	..	
Barber ..	1		
Apprentices ..	3		
Coachman ..	1		
Musician ..	1		
		Total.	195

TABLE XII.—*continued.**Females.*

Occupation.	No.	Occupation.	No.
Labourers ..	75	School girl ..	1
Dressmakers ..	26	Nurse ..	1
Washerwomen ..	10	Schoolmistress ..	2
Not known ..	7	Higgler ..	4
Domestic Servants ..	27	Typist ..	1
Cultivators ..	5	Housekeepers ..	7
Housemaid ..	1	Gentlewoman ..	1
		Total	168

TABLE XIII.—Showing the Physical condition of patients admitted in 1920.

	Males.	Females.	Total.
In good bodily health and condition ..	55	33	88
In fair bodily health and condition ..	103	92	195
In poor, feeble, very feeble, bad and exhausted condition ..	33	43	76
Not known ..	3	—	3
Total ..	194	168	362

FINANCIAL STATEMENT.

TABLE XIV—Cost of maintenance for the year 1920-21

	£	s.	d.
Salaries ..	2,748	16	1
Wages ..	8,798	3	4
Religious Services ..	60	0	0
Provisions ..	23,862	17	11
Necessaries ..	1,418	13	4
Clothing and Bedding ..	6,951	14	6
Equipment ..	423	11	3
Furniture ..	84	3	10
Wine and Spirits ..	87	15	0
Surgery and Dispensary ..	557	11	5
Funeral Expenses ..	360	4	8
Removals ..	48	5	8
Repairs ..	516	8	5
Farm and Grounds ..	106	18	4
Miscellaneous ..	130	12	5½
Telephones ..	24	3	0
Scavengery ..	9	18	6
Lighting ..	953	17	6
Conveyance of Lunatics ..	904	15	5
Water ..	500	0	0
Uniforms ..	448	15	3
	£48,997	5	10½

LESS RE-IMBURSEMENTS.

Contributing Patients, &c.	£	s.	d.
	2,056	18	11½
Immigration Fund (Law Law 31 of 1910) ..	214	14	0
Parochial Poor Rates (Law 26 of 1914) ..	19,341	0	0
Net cost to General Revenue ..			
	27,384	12	11

TABLE XV.—Law 26 of 1914.

	Law 26 of 1914.			Amount for	Law 26 of 1914.			Amount for
	No. of Patients, 1919-1920.				No. of Patients, 1920-1921.			
	Males	Fe- Males	Total.	1919-1920.	Males	Fe- Males	Total.	1920-1921.
Kingston ..	223	193	416	£ 1,042 19 3	186	184	370	£ 1,359 0 0
St. Andrew ..	53	58	111	942 7 6	63	57	120	1,228 0 0
St. Thomas ..	24	35	59	702 6 5	29	33	62	915 0 0
Portland ..	27	43	70	881 8 7	31	40	71	1,148 0 0
St. Mary ..	62	48	110	1,302 15 9	63	45	108	1,697 0 0
St. Ann ..	44	40	84	1,261 12 6	42	40	82	1,644 0 0
Trelawny ..	17	27	44	633 5 4	14	23	37	825 0 0
St. James ..	44	45	89	738 17 2	41	43	84	962 0 0
Hanover ..	16	31	47	668 8 7	16	32	48	871 0 0
Westmoreland ..	59	62	121	1,186 14 3	51	58	109	1,546 0 0
St. Elizabeth ..	62	53	115	1,405 7 2	61	56	117	1,831 0 0
Manchester ..	54	50	104	1,164 3 7	54	41	95	1,517 0 0
Clarendon ..	61	47	108	1,319 17 10	47	48	95	1,719 0 0
St. Catherine ..	106	102	208	1,573 5 9	96	100	196	2,050 0 0
Port Royal ..	1	..	1	22 12 10	..	..	..	29 0 0
	853	834	1,687	14,846 2 6	794	800	1,594	19,341 0 0

TABLE XVI.—Statement respecting Minor Funds of the Jamaica Lunatic Asylum to 31st March 1921.

1.—SERVANTS' FINE FUND.

	£	s.	d.
Balance on 31st March, 1920 ..	..	190	7 11 $\frac{3}{4}$
Receipts in 1920-21 ..	..	16	1 7
Total ..	..	206	9 6 $\frac{3}{4}$
Expenditure 1920-21 ..	..	43	13 6
Amount at credit 31st March, 1921 ..	..	162	16 0 $\frac{1}{4}$

2.—PATIENTS FUND.

Balance on 31st March, 1920 ..	..	1,316	6	11
Receipts in 1920-21 ..	..	109	15	7 $\frac{1}{4}$
Expenditure during 1920-21 ..	..	1,426	2	6 $\frac{1}{4}$
		59	14	4
Amount at Credit 31st March, 1921 ..	..	1,366	8	2 $\frac{1}{4}$

3.—O'LOUGHLIN'S FUND.

Balance on 31st March, 1920 ..	..	438	0	7
Receipts in 1920-21 ..	..	15	5	3
Expenditure during 1920-21 ..	..	453	5	10
		14	5	2
Amount at credit 31st March, 1921 ..	..	439	0	8

TABLE No. XVII.—Shewing the total number of patients under treatment from 1882-83 to 1920-1921 the Total Cost; the Re-imbursements-in-Aid of Expenses incurred by the Government; the source from which they are derived; and the Cost of Lunatic Asylum to General Revenue.

Years.	Total number of Patients under treatment	REIMBURSEMENTS-IN-AID.			Net Cost of the Lunatic Asylum to General Revenue.
		Contributing Patients, &c.	Immigration Department.	Parochial Poor Rate.	
1882-8	512	£ s d.	£ s d.	£ s d.	£ s d.
1883-84	505	7 061 16	189 4 5	4,643 8 8	2,228 13 8½
1884-85	573	6,935 14	208 6 2	5,203 10 11	1,523 17 1½
1885-86	531	6,871 12	552 13 2	4,879 16 0	1,739 3 4
1886-87	530	7,027 7	376 6 9	4,677 15 5	1,973 5 1
1887-88	541	7,067 10	415 1 7	4,971 6 3	5,387 1 10
1888-89	584	7,710 5	365 4 7	5,587 15 9	5,953 0 4
1889-90 (6 months)	541	8,781 14	391 0 6	6,677 13 2	7,068 13 8
1890-91	648	4,755 14	151 13 5	3,796 11 11	3,948 5 4
1891-92	704	10,093 10	301 10 0	8,208 4 11	8,509 14 11
1892-93	702	11,578 17	471 6 10	9,276 3 2¾	9,747 10 0¾
1893-94	729	11,453 1	532 6 0	9,369 19 4	9,902 5 4
1894-95	741	11,280 18	492 16 4	9,197 13 9	9,690 10 1
1895-96	795	11,648 15	384 2 8	9,457 16 2½	9,841 18 10½
1896-97	851	11,867 3	418 13 6	9,941 19 0	10,360 12 6
1897-98	926	12,901 18	458 15 2	10,932 11 0	11,391 6 2
1898-99	953	12,651 4	532 19 8	11,772 1 4	12,305 1 0
1899-1900	956	13,559 10	359 10 8	11,767 0 9	12,767 0 9
1900-1901	1,019	14,445 3	454 9 1	11,514 19 3	11,960 8 4
1901-1902	1,050	14,759 17	525 8 5	12,333 1 8½	12,858 10 1½
1902-1903	1,089	15,029 0	547 3 10½	12,468 15 9¼	13,015 19 7¼
1903-1904	1,165	16,017 7	517 18 1½	13,101 14 3½	13,619 12 5
1904-1905	1,240	16,007 2	406 6 2	13,926 12 3½	14,342 18 5½
1905-1906	1,264	16,852 9	449 9 2	13,843 10 0½	14,292 19 2½
1906-1907	1,308	16,298 17	631 9 11½	14,396 14 5	15,028 14 4½
1907-1908	1,285	17,078 8	654 4 3½	14,246 2	14,900 6 10½
1908-1909	1,269	17,786 8	474 1 3	15,304 11 4½	15,778 12 7½
1909-1910	1,320	17,453 7	633 5 10½	15,828 13 8½	16,461 19 7
1910-1911	1,409	19,131 15	459 16 1	15,934 10 4½	16,394 6 5½
1911-1912	1,439	17,797 1	676 7 10	16,540 0 3½	17,263 3 6½
1912-1913	1,548	18,414 4	735 0 8	15,722 17 11	16,589 9 7½
1913-1914	1,634	19,613 14	889 13 3	19,4 1 9½	9,321 15 8½
1914-1915	1,670	20,338 18	917 4 0	8,837 13 9½	9,940 15 6½
1915-1916	1,733	22,946 9	961 17 11	8,660 4 9	9,826 18 1½
1916-1917	1,730	23,787 12	1,130 19 0½	10,46 15 5½	10,510 0 8½*
1917-1918	1,637	28,416 10	1,098 9 0	1,31 11 0½	1,207 11 6½*
1918-1919	1,727	33,044 13	1,291 16 10	226 1 8½	1,2537 19 2½*
1919-1920	1,745	37,460 10	1,371 12 8	191 18 9½	13,856 7 8½
1920-1921	11747	48,997 5	1,963 14 1½	219 1 1½	14,846 2 6
			2,056 18 11½	214 14 0	10,341 0 0
					21,612 12 11½
					27,34 12 11
			25,160 2 0	2,066 8 4½	419,180 7 6½
					446,408 7 11½
					183,574 0 11

* The increase during the years is due to General Revenue being charged with half of the cost of maintenance of parochial patients hitherto borne by the parishes concerned.

† For 12 months from 1st January to 31st December, 1920.

Table No. XVIII.—A Return shewing the General, Financial and other Operations of the Lunatic Asylum from the Year 1874-75 to the Year 1920-1921.

Year	Daily Average Number.	Salaries. and Religious Services.	Wages.	Provisions.	Necessaries.	Clothing, Furniture and Bedding.					
						£	s.	d.	£	s.	d.
1874-75	324.43	1,412 2 10	879 15 7½	3,037 14 1½	139 5 0	487	0	10			
1875-76	324.21	1,553 13 10	923 4 10½	2,910 11 7¼	116 13 8¾	387	12	3			
1876-77	342.52	1,660 4 11	868 8 2	2,832 18 11	134 15 11½	347	12	11½			
1877-78	361.57	1,705 3 10	851 7 0½	2,959 18 10	161 10 6	379	8	6½			
1878-79	364.06	1,853 6 4	805 8 10½	3,167 9 11½	224 0 10	333	12	2			
1879-80	381.25	1,782 18 2	888 11 2	3,161 17 4	176 4 2	328	10	9½			
1880-81	368.48	1,771 16 6	884 1 3	3,272 19 3½	218 3 2	289	10	3			
1881-82	358.67	1,784 8 0	861 12 11	2,963 9 9	231 5 4	303	14	5			
1882-83	364.06	1,829 3 8	922 2 5	3,152 13 8½	220 19 7	322	0	6½			
1883-84	396.05	1,708 12 10	932 15 5½	3,203 7 0	174 4 7	372	11	9½			
1884-85	399.98	1,792 10 10	936 2 3½	3,079 11 8	166 7 0	387	4	4			
1885-86	382.09	1,843 11 0	923 0 0	3,150 1 10½	176 4 4	345	9	6			
1886-87	407.58	1,556 16 7	933 13 2	3,416 13 5	216 19 8	421	2	3			
1887-88	398.00	1,533 14 7	994 18 7	3,741 6 1½	270 19 10	408	6	3			
1888-89	438.24	1,783 9 9	1,161 7 10	4,280 19 5	358 0 0	438	3	2			
1889-90 (6 mons.)	465.17	943 10 10	579 11 11	2,351 14 0	190 8 7	209	9	6			
1890-91	496.16	1,918 8 6	1,268 15 0	5,102 14 2	403 6 6	433	4	11½			
1891-92	543.93	1,934 9 8	1,462 14 6½	6,035 16 4	424 12 8½	685	7	9			
1892-93	558.57	1,969 0 0	1,461 6 9½	5,421 17 7½	514 18 2	691	17	8½			
1893-94	571.98	2,239 1 4	1,509 19 3	5,299 17 4½	494 0 1	519	5	11½			
1894-95	592.72	2,394 17 3	2,259 5 2	4,565 11 10½	529 13 7	667	8	10½			
1895-96	636.78	2,357 1 0	2,328 16 7	4,772 11 10½	499 1 6	625	2	5			
1896-97	694.15	2,519 17 9	2,410 18 3	5,336 10 2	545 9 2½	803	18	8½			
1897-98	759.70	2,554 1 11	2,838 16 10	5,470 9 11	615 17 4½	993	2	4½			
1898-99	774.96	2,586 1 2	3,175 7 6	5,342 10 9½	529 7 0½	924	14	4½			
1899-1900	789.03	2,441 4 10	3,202 3 5	5,367 9 11	581 0 11	977	9	3½			
1900-1901	844.32	2,564 0 11	3,198 9 11	5,807 12 5½	781 1 0½	992	2	6½			
1901-1902	862.68	2,438 8 6	3,266 7 4	6,007 9 7½	799 8 4½	1,197	6	1½			
1902-1903	915.42	2,486 19 2	3,367 2 11	6,113 5 10½	799 5 2	1,099	16	1½			
1903-1904	972.20	2,391 1 10	3,419 12 9	6,880 5 2½	884 2 7	1,408	11	11			
1904-1905	1022.26	2,142 4 10	3,470 1 11	7,618 9 3	882 7 4	1,069	3	9			
1905-1906	1048.56	2,114 14 6	3,543 15 6	8,342 0 8½	979 19 10½	797	11	10			
1906-1907	1048.74	2,230 17 7	3,672 11 10	7,535 11 0	994 15 4½	1,023	19	0			
1907-1908	1033.61	2,302 16 7	3,784 15 8	8,084 9 1	305 12 9	1,525	9	7			
1908-1909	1050.02	2,376 6 3	3,825 10 3	8,874 4 2	426 3 4	1,212	8	5			
1909-1910	1081.00	2,432 0 0	3,834 1 9	8,616 8 1½	460 4 6						
1910-1911	1137.15	2,451 6 5	3,944 3 1	9,364 13 9	369 15 9						
1911-1912	1183.81	2,403 14 9	4,001 13 7	8,422 13 7	392 6 0						
1912-1913	1271.94	2,449 3 2	4,048 7 9	8,445 0 10	571 2 0						
1913-1914	1323.34	2,579 14 0	4,087 2 11	9,404 16 11½	620 18 9						
1914-1915	1386.57	2,619 0 7	4,281 11 10	9,581 1 0	1,052 10 9						
1915-1916	1426.98	2,584 18 11	4,571 13 3	10,768 1 10	1,276 17 3						
1916-1917	1390.76	2,521 4 2	4,794 1 7	11,093 5 6½	1,116 2 5						
1917-1918	1329.99	2,353 11 3	4,701 2 8	14,731 7 3½	1,269 4 8						
1918-1919	1392.32	2,438 14 4	4,987 14 3	16,984 9 11½	1,415 2 3						
1919-1920	1396.54	2,799 3 10	5,942 8 6	19,754 16 9½	1,163 10 6						
1920-1921	*1314.60	2,808 16 1	8,798 3 4	23,862 17 11	1,418 13 4						

*For 12 months 1st January to 31st December, 1920.

TABLE No. XVIII., *continued.*

Year.	Wine, Spirits and Beer.	Surgery and Dispensary.	Funeral Ex- penses.	Repairs.	Farm and Grounds.	Miscellaneous and Telephone.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.
1874-75	90 0 3½	85 19 1½	32 18 6	136 16 7	265 0 6	99 5 7
1875-76	74 6 6	124 6 11	44 7 0	135 13 9	297 14 2½	99 10 5½
1876-77	59 12 6	65 10 6½	36 19 4½	129 13 11½	251 18 2	63 3 4½
1877-78	34 2 9	99 9 7½	41 9 9½	134 15 6½	195 3 1½	192 16 6
1878-79	30 5 9	49 4 7	38 10 1	104 4 8	151 6 4	175 18 10
1879-80	34 11 0	76 13 2	50 1 5	122 3 0½	218 14 5½	222 13 4
1880-81	57 10 0	65 13 2½	110 19 5	122 18 0	211 15 5½	215 12 9
1881-82	48 18 6	49 10 7½	71 4 11	117 0 11	145 15 1	243 3 3
1882-83	30 7 0	32 5 1½	123 12 6	116 1 8	87 1 9½	199 18 5½
1883-84	61 4 0	68 11 8	78 3 3	129 10 9½	97 8 3½	84 11 6½
1884-85	46 18 0	25 18 4	84 10 8½	112 3 7½	122 7 10	98 8 5½
1885-86	56 16 0	30 18 11	108 3 8	125 9 3	132 0 7	112 6 7½
1886-87	56 0 0	68 10 4	52 5 10	120 12 1	122 3 10½	71 12 2
1887-88	65 13 4	67 2 7½	61 5 1½	282 0 2½	151 5 11	109 10 2
1888-89	68 14 0	104 15 7	78 5 9	151 5 8	134 8 4	206 19 9
1889-90 (6 mons.)	32 14 6	101 7 0	41 1 5	105 1 0	88 5 11	88 16 2
1890-91	40 12 0	168 9 10	66 16 0	176 3 3½	160 3 0	190 11 7½
1891-92	45 13 6	141 18 3	78 8 3	190 6 2	171 9 4	175 12 2½
1892-93	41 12 6	207 7 7	71 2 8	233 0 6½	177 14 11	187 6 4
1893-94	37 6 6	184 10 4	79 7 0	191 16 0½	177 14 3	194 12 8½
1894-95	37 2 8	195 3 4	68 5 11	239 19 2½	194 10 8	234 16 1½
1895-96	39 7 9	197 17 10	47 11 8	238 19 3	197 18 11	235 4 9
1896-97	33 7 6	194 1 4	50 10 2½	259 7 7	219 4 9	242 16 10½
1897-98	51 0 6	238 4 2½	64 2 11	289 1 8	262 7 3½	366 2 3½
1898-99	31 10 2½	253 15 2½	68 2 4½	164 17 3½	153 12 11½	215 13 5½
1899-1900	35 0 3	218 16 1	72 12 6½	144 19 2½	137 17 9	251 17 1½
1900-1901	39 1 6	133 0 2	45 0 9	163 15 7½	149 17 7	265 3 6½
1901-1902	43 0 6	210 15 0	61 17 4	147 17 7½	145 14 8½	254 2 4
1902-1903	44 13 0	220 11 10	46 2 5	171 10 1½	151 0 4½	262 12 1½
1903-1904	60 16 0	210 18 3	79 18 4	187 6 10	153 2 4½	266 15 0½
1904-1905	42 6 6	180 14 6	73 2 2	138 5 6	88 1 2	212 15 3
1905-1906	24 18 3	271 2 6	73 5 7	180 2 5	81 17 3	217 14 1½
1906-1907	22 8 6	318 1 4	64 19 0	162 14 0	33 9 0½	198 13 5
1907-1908	36 19 6	288 18 11½	72 19 6	134 14 0	40 0 6½	362 2 11
1908-1909	23 1 3	264 14 6	72 8 0	173 3 5	27 4 4	184 1 6
1909-1910	55 19 3	255 10 11	70 14 0	80 17 0	96 11 9	212 18 3½
1910-1911	53 8 9	278 13 2	62 16 0	143 0 11	104 2 3	66 17 1
1911-1912	30 8 5	298 8 4	71 5 3	85 5 2	89 15 6	177 14 11
1912-1913	29 19 11	298 6 4	67 16 10	85 13 7	94 1 4	168 6 6½
1913-1914	35 6 10	341 2 6	100 7 3	127 17 6	88 18 5	217 3 2
1914-1915	24 11 8	273 17 9	76 15 9	91 6 4	90 0 9	124 5 5
1915-1916	16 15 0	354 8 11	87 19 0	128 2 5	67 13 1	113 4 5½
1916-1917	39 18 8	524 17 6	126 17 0	143 1 3	50 11 3	150 17 11
1917-1918	43 12 6	589 9 3	96 7 6	148 11 7	80 11 1	187 4 10
1918-1919	30 1 0	443 1 0½	171 9 8	169 3 11	46 14 2	262 3 4
1919-1920	56 3 3	474 0 11	149 19 5	145 10 5	9½ 4 8	162 18 11½
1920-1921	87 15 0	557 11 5	360 4 8	516 8 5	106 18 4	154 15 5½

TABLE No. XVIII., *continued.*

Year	Removal of Lunatics.	Seavengery.	Furniture Public Departments.	Total Cost.	Amount of Reimbursements from contributing and Immigration Fund Patients.	Cost exclusive of reimbursements in previous column.	Weekly Rate per Head.	Admitted during the year.			
								Males.	Females.	Total	
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1874-75	16 19 0	..	..	6,682 18 0	888 1 6	5,844 16 6	0 6 10 ³ ₄	46	38	84
1875-76	4 0 0	..	..	6,671 15 1 ¹ ₂	752 1 6	5,919 13 7 ¹ ₂	0 6 11 ³ ₄	58	43	101
1876-77	17 12 8	..	..	6,473 11 5 ¹ ₂	827 5 0	5,646 6 5 ¹ ₂	0 6 3 ³ ₄	69	43	112
1877-78	19 0 3	..	..	6,774 6 4 ¹ ₂	764 18 10	6,009 7 6 ¹ ₂	0 6 4 ² ₃	54	49	103
1878-79	11 0 6	..	..	7,004 8 11	159 12 10	6,844 16 1	0 7 2 ¹ ₄	53	51	104
1879-80	14 2 10	..	..	7,007 0 10 ¹ ₂	168 7 8	6,908 13 2 ¹ ₂	0 6 11	56	59	115
1880-81	30 9 8	..	..	7,251 9 2	191 7 2	7,060 2 0	0 7 4	65	42	107
1881-82	26 9 6	..	..	6,846 13 2 ¹ ₂	134 16 1	6,711 17 1 ¹ ₂	0 7 2	42	56	98
1882-83	25 10 4	..	..	7,061 16 9 ¹ ₂	189 14 5	6,872 2 4 ¹ ₂	0 7 2 ³ ₄	73	68	141
1883-84	24 13 0	..	..	6,935 14 2 ¹ ₂	208 6 2	6,727 8 0 ¹ ₂	0 6 5 ³ ₄	80	59	139
1884-85	19 10 0	..	..	6,871 12 6	252 13 2	6,618 19 4	0 6 4	56	64	120
1885-86	28 18 1	..	..	7,027 7 3	376 6 9	6,651 0 6	0 6 8	69	70	139
1886-87	30 11 0	..	..	7,067 10 4 ¹ ₂	415 15 7	6,651 14 9 ¹ ₂	0 6 3 ¹ ₂	79	62	141
1887-88	24 2 9	..	..	7,700 5 6	305 4 7	7,345 0 11	0 7 0	78	71	149
1888-89	15 4 9	..	..	8,781 14 0	391 0 6	8,390 13 6	0 7 4	92	69	161
1889-90 (6 mos)	10 9 0	..	..	4,755 14 0	151 13 5	4,604 0 7	0 7 7	39	43	82
1890-91	22 1 0	..	..	10,093 10 7 ¹ ₂	301 10 0	9,792 0 7 ¹ ₂	0 7 7	93	79	172
1891-92	25 3 6	207 5 0	..	11,578 17 2 ² ₃	471 6 10	11,107 10 4 ¹ ₂	0 7 8 ³ ₄	80	106	186	
1892-93	19 3 6	195 12 8	261 0 4	11,453 1 3 ³ ₄	532 6 0	10,920 15 3 ³ ₄	0 7 7	78	80	158	
1893-94	8 7 9	192 19 0	62 0 6	11,280 18 1	492 16 4	10,788 1 9	0 7 2	75	78	153	
1894-95	19 6 6	193 9 4 ² ₁	49 5 0	11,648 15 6 ¹ ₂	384 2 8	11,264 12 10 ¹ ₂	0 7 3 ¹ ₂	84	85	169	
1895-96	27 7 6	192 0 2	47 8 11	11,867 3 1 ² ₃	418 13 6	11,448 9 7 ³ ₄	0 6 10 ¹ ₂	90	84	174	
1896-97	27 12 0	208 4 0	50 0 0	12,901 18 4 ¹ ₂	478 15 2	12,443 3 2 ¹ ₂	0 6 10 ¹ ₂	81	106	187	
1897-98	19 0 3	199 11 1	99 14 2	14,061 12 9	532 18 9	13,528 13 1	0 6 10	109	95	204	
1898-99	39 10 9	126 0 11	..	13,651 4 1	359 10 8	13,291 13 5	0 6 7	88	80	168	
1899-1900	24 13 6	104 3 3	..	13,559 10 1	454 9 1	1,305 1 0	0 6 4	96	93	189	
1900-1901	26 4 3	116 12 7	163 0 4	14,445 3 2 ¹ ₂	525 8 5	13,919 14 9 ¹ ₂	0 6 4	104	96	200	
1901-1902	29 5 9	115 12 6	42 12 0	14,759 17 8	547 3 10 ¹ ₂	14,212 13 9 ¹ ₂	0 6 4	99	83	182	
1902-1903	22 6 9	111 10 5	94 12 11	15,029 0 6	517 18 1 ¹ ₂	14,511 2 4 ¹ ₂	0 6 1	118	108	226	
1903-1904	17 5 9	22 0 5	35 10 6	16,017 7 10	406 6 2	15,611 1 8	0 6 2	105	101	206	
1904-1905	19 18 0	17 17 1	50 18 0	16,006 5 3	449 9 2	15,557 12 10	0 5 10	124	116	240	
1905-1906	30 11 3	3 18 0	190 17 10	16,852 9 7 ¹ ₂	631 19 11 ¹ ₂	16,220 9 8	0 5 11	134	96	230	
1906-1907	35 18 3	..	4 19 6	16,298 17 10	654 4 3 ¹ ₂	15,644 13 0 ¹ ₂	0 5 10	109	125	234	
1907-1908	30 12 9	2 16 3	..	17,078 8 3	474 1 3	15,604 7 0	0 6 3 ¹ ₂	148	131	279	
1908-1909	22 11 0	1 11 8	..	17,786 8 11	633 5 10 ¹ ₂	17,153 3 0 ¹ ₂	0 6 5	114	123	237	
1909-1910	22 2 3	0 12 6	70 2 1	17,453 7 7 ³ ₄	459 16 1	16,993 11 6 ³ ₄	0 6 1 ¹ ₂	139	123	262	
1910-1911	39 6 4	..	63 15 1	19,131 15 7	723 3 3 ¹ ₂	18,08 12 3 ³ ₄	0 6 0	164	160	324	
1911-1912	31 15 10	1 18 3	133 7 8	17,797 1 2	866 11 8 ² ₃	16,930 9 5 ¹ ₄	0 5 5 ³ ₄	138	130	268	
1912-1913	30 1 7	5 14 2	213 12 4	18,414 4 1	880 13 3	17,524 10 10	0 5 4	160	189	349	
1913-1914	49 0 11	3 6 11	47 6 1	19,613 14 8 ¹ ₂	1103 1 9 ¹ ₂	18,510 12 11	0 5 4 ² ₃	162	56	313	
1914-1915	37 16 8	0 16 0	64 18 10	20,336 18 10	1166 13 4 ¹ ₂	19,170 5 5 ³ ₄	..	158	171	329	
1915-1916	40 0 7	1 7 0	51 13 5	22,946 9 6	1357 0 9	21,589 8 9	..	192	141	333	
1916-1917	39 12 5	0 8 0	48 12 3	24,318 8 6	1290 7 9 ² ₃	23,028 0 8 ¹ ₂	..	155	131	286	
1917-1918	35 14 10	4 16 0	58 14 0	28,416 10 3 ² ₃	1491 10 5	26,924 19 10 ² ₃	..	167	143	310	
1918-1919	42 16 9	7 15 9	37 0 5	33,044 13 4	1624 0 4 ¹ ₂	31,420 12 11 ³ ₄	..	193	175	368	
1919-1920	113 7 1	9 9 6	38 19 4	37,4 10 8	2182 15 2 ² ₃	35,277 15 5 ⁴ ₁	..	199	134	333	
1920-1921	48 5 8	9 18 6	84 3 10	48,997 5 10 ¹ ₂	2271 12 11 ¹ ₂	46,725 12 11	..	*194	168	362	

Year.	Lighting.	Clothing and bedding.	Equipment.	Conveyance of Lunatics.	Water.	Uniforms.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1908-1909	303 0 10	..	..	..	..	..
1909-1910	311 11 8	791 1 6 ¹ ₂	141 12 0	..	..	..
1910-1911	463 13 4	1,261 8 8	259 9 0	..	..	..
1911-1912	423 9 9	1,079 15 4	153 8 10	..	..	..
1912-1913	399 13 9	1,351 0 6	171 3 6	..	..	..
1913-1914	386 7 2	1,310 9 4	213 15 6	..	..	..
1914-1915	338 3 3	1,447 6 11	232 15 4	..	..	..
1915-1916	338 18 8	1,817 7 5	193 14 7	533 13 9	..	..
1916-1917	318 1 10	2,188 14 6	238 3 9	393 2 3	..	..
1917-1918	421 1 5	3,014 11 11	235 16 1	444 12 5	..	..
1918-1919	572 4 10 ³ ₄	3,961 0 2	254 4 3	729 17 2 ¹ ₂	..	..
1919-1920	691 3 7	4,452 11 11	391 2 6	520 19 6	..	..
1920-1921	953 17 6	6,951 14 6	423 11 3	904 15 5	500 0 0	448 15 3

*For 12 months from 1st January to 31st December, 1920.

